

DRAFT
INITIAL STUDY/
NEGATIVE DECLARATION

PRESENTATION HIGH SCHOOL
SPORTS FACILITIES PROJECT



CITY OF SAN JOSE, CALIFORNIA

DECEMBER 2003

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I. INTRODUCTION AND PURPOSE

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 *et. seq.*), and the regulations and policies of the City of San Jose. This Initial Study evaluates the potential environmental impacts which might reasonably be anticipated to result from the construction of a sports facility at an existing high school in central San Jose.

The project is the construction of sports facilities on the Presentation High School campus including a soccer/field hockey field and swimming pool and the renovation of the existing softball field. Currently, Presentation High School soccer, field hockey, and swim/water polo teams are required to practice and compete at off-site locations due to a lack of sports facilities on-site. Due to the diminishing availability and high cost of renting such off-site facilities, the school desires to construct a regulation-sized soccer/field hockey field and swimming pool on the school campus. The existing softball field would also be renovated as part of the project.

II. PROJECT INFORMATION

A. PROJECT TITLE

Presentation High School Sports Facilities Project

B. PROJECT LOCATION

The 8.8 acre project site is located between Plummer and Booksin Avenues, approximately 525 feet south of Curtner Avenue in the Willow Glen area of central San Jose, as shown on Figures 1 and 2.

C. LEAD AGENCY NAME AND ADDRESS

City of San José
Department of Planning, Building and Code Enforcement
801 North First Street, Room 400
San José, CA 95110

D. CONTACT PERSON AND TELEPHONE NUMBER

Ron Eddow, Senior Planner
Department of Planning Building and Code Enforcement, (408) 277-4576

E. PROPERTY OWNER'S NAME AND ADDRESS

Presentation High School
2281 Plummer Avenue
San José, CA 95125
Mary Miller, Principal

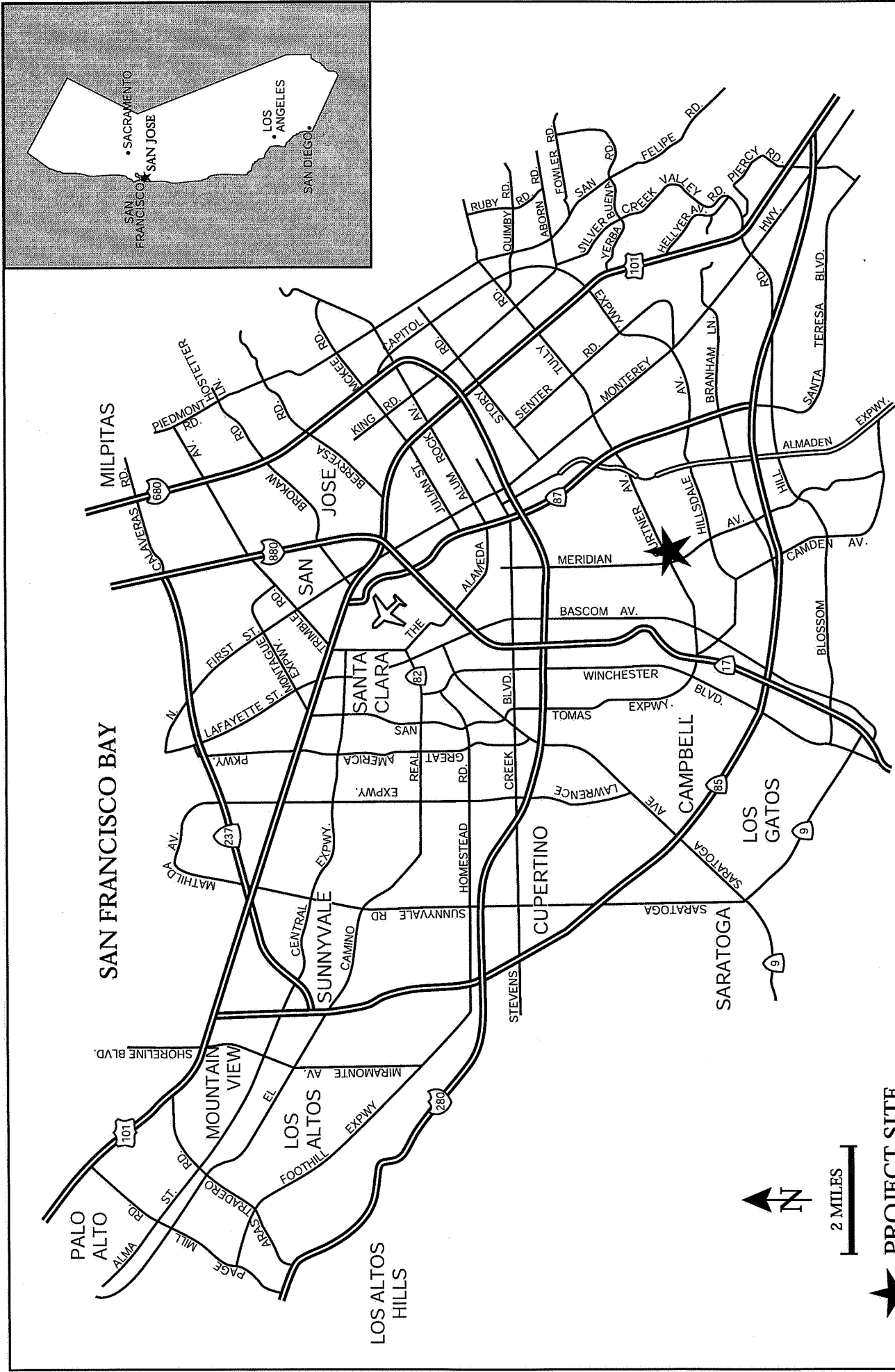
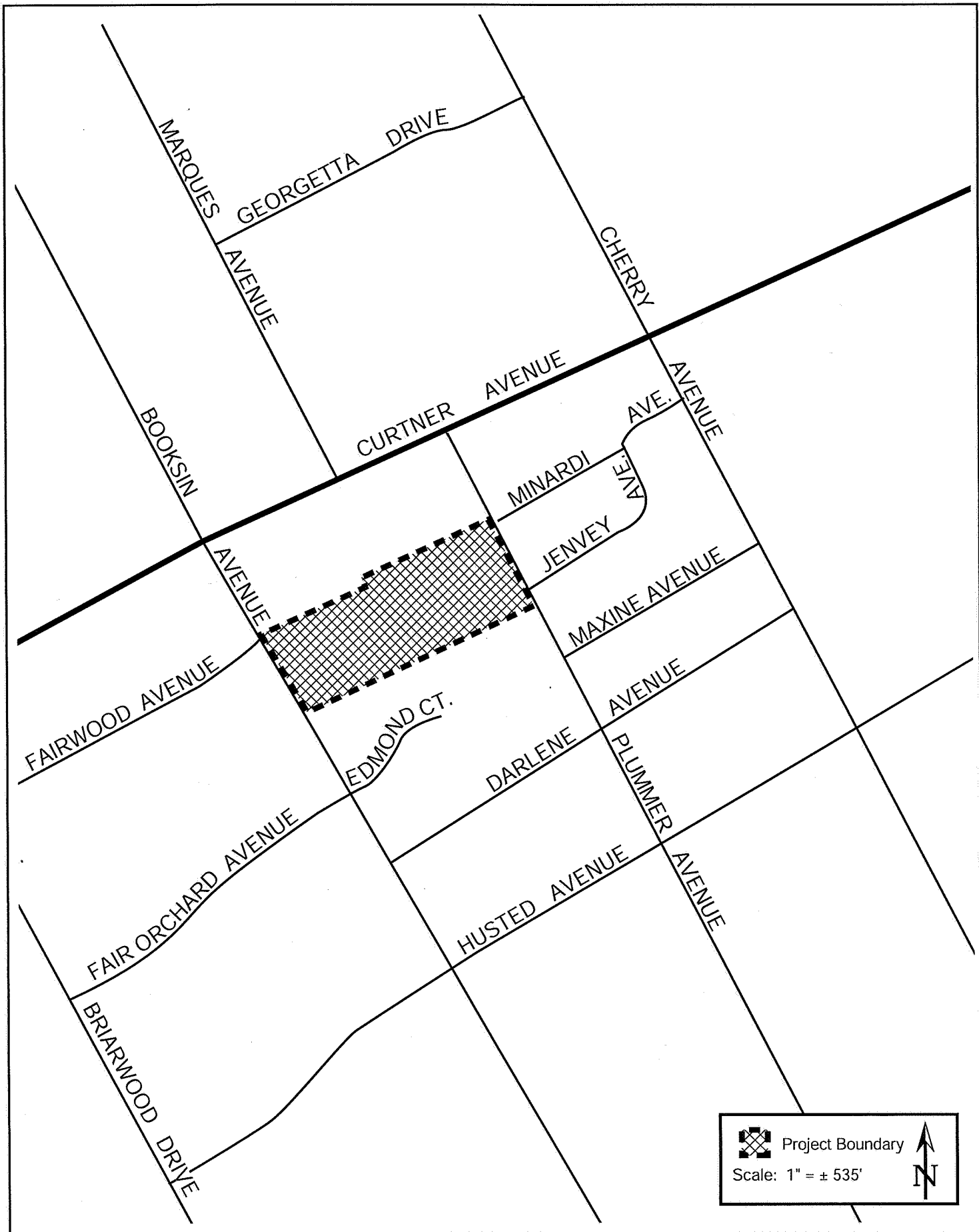


FIGURE 1

REGIONAL MAP



VICINITY MAP

FIGURE 2

F. ASSESSOR'S PARCEL NUMBER

729-57-002

G. GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan Designation: Public/Quasi-Public

Zoning District: R-1-8 Single-Family Residential

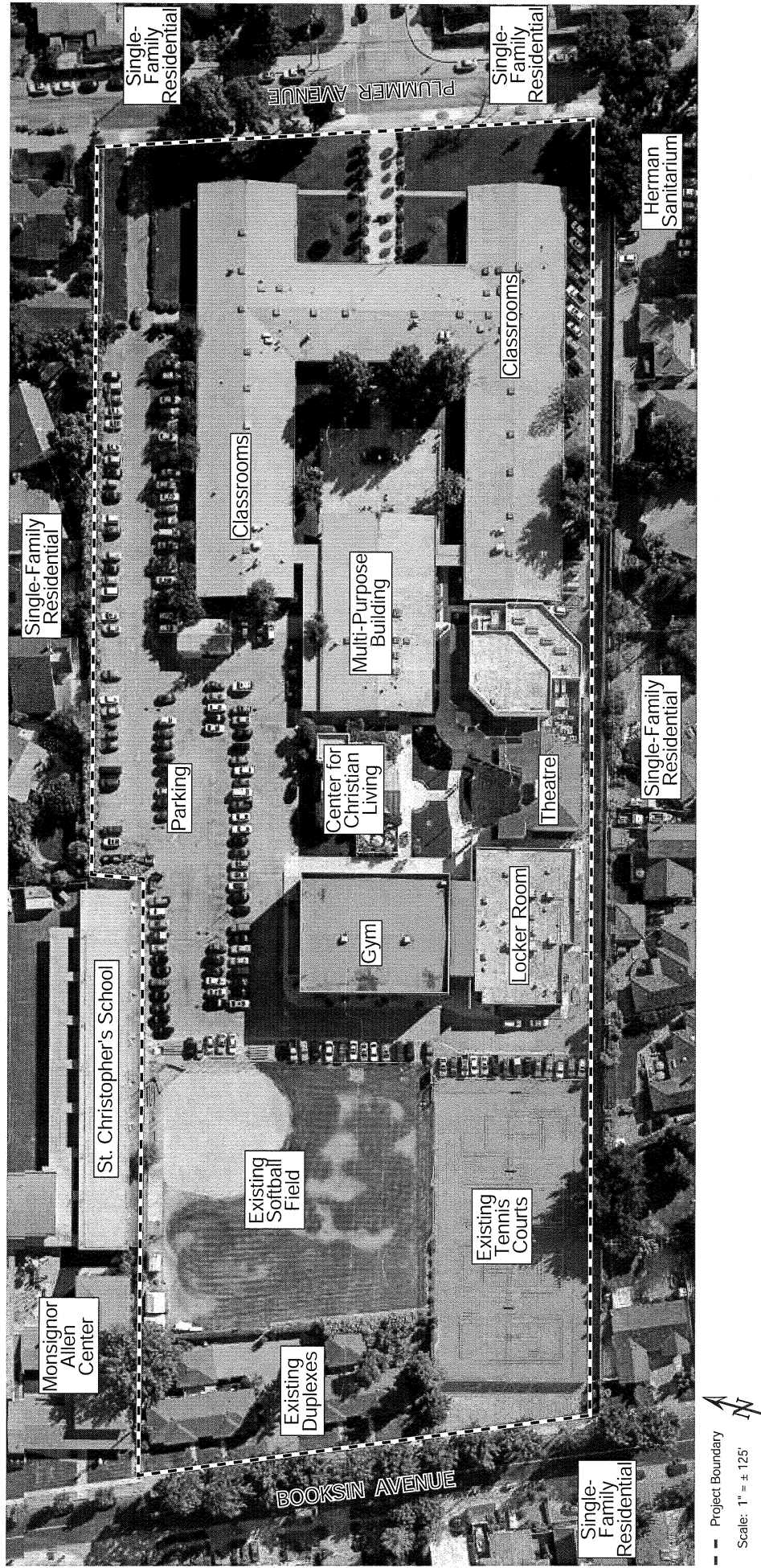
III. PROJECT DESCRIPTION

A. PROJECT DESCRIPTION

The proposed project is the construction of new sports facilities on the Presentation High School campus. As shown on Figure 3, the western portion of the site is currently occupied by four tennis courts, a softball diamond, three small portable equipment storage sheds, and two duplexes (four dwelling units). The proposed project would require the removal of the tennis courts and duplexes, while the storage sheds would be relocated in order to construct the soccer field. The duplexes are owned by the Sisters of the Presentation and are currently used to house one Sister and the High School's groundskeeper. These residents would be relocated prior to the commencement of project construction. Tennis practice and matches would occur off-site after project completion.

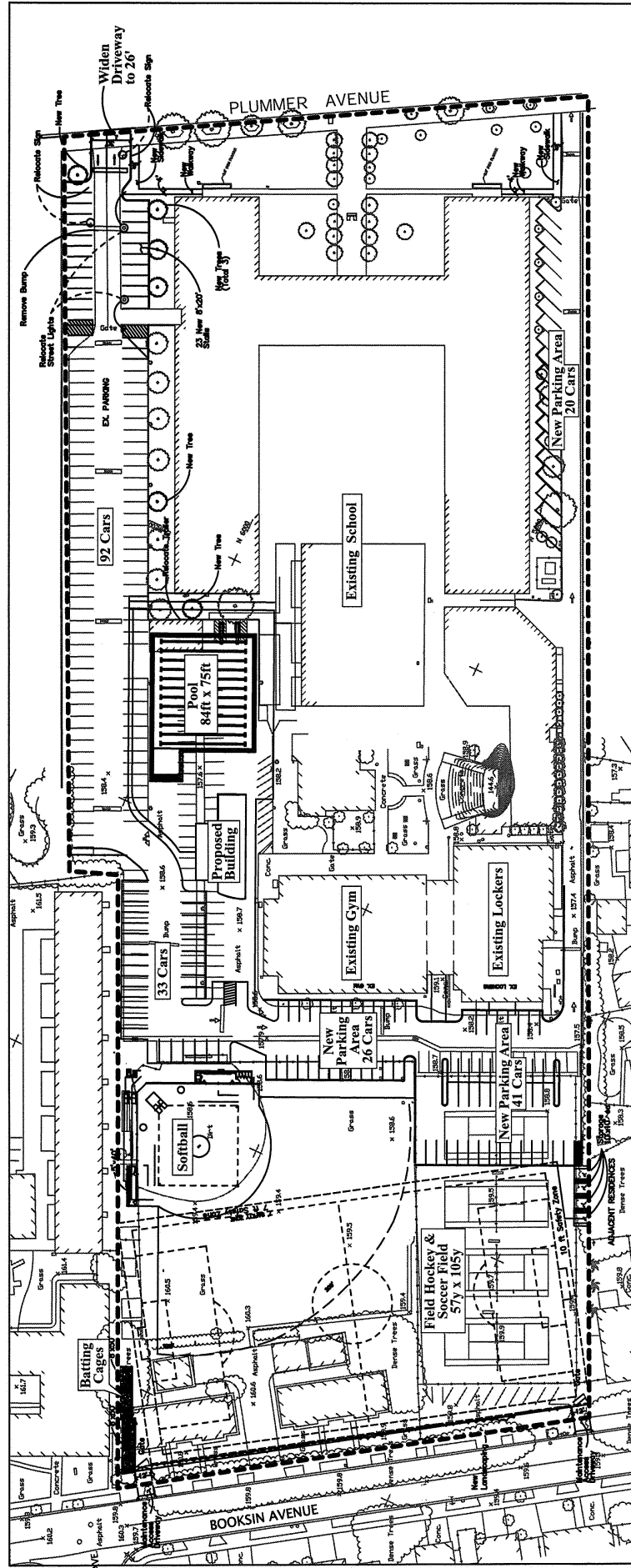
The proposed project would include the construction of a regulation-sized soccer field and swimming pool and the renovation of the existing softball diamond, as shown on Figure 4 and as described below. The existing storage sheds on the site would also be relocated along the southern end of the proposed soccer/field hockey field. All facilities would be used for the Presentation High School physical education program and sports team practices and games/meets. Summer soccer camps are currently conducted on the project site and would continue after construction of the new soccer field. The proposed swimming pool would be used for summer swim lessons. The table below shows the number of Presentation High School sporting events/matches expected to be conducted on the project site after project completion compared to the existing number of events. Existing events include tennis matches and softball games.

TABLE 1: ON-SITE EVENT/MATCH SUMMARY BY MONTH		
Month	Existing Events	Future Events
September	4	7
October	10	8
November	0	3
December	0	3
January	0	13
February	0	5
March	8	10
April	5	6
May	3	5



AERIAL PHOTOGRAPH

FIGURE 3



--- Project Site Boundary
Scale: 1" = ± 80'

SITE PLAN

FIGURE 4

Soccer/Field Hockey Field

The soccer/field hockey field would be approximately 105 yards in length and 57 yards in width with synthetic turf to allow year-round play with minimal maintenance and no watering. The synthetic turf is permeable and underlain by an 8-inch deep layer of composite gravel (two inches of top stone over six inches of drain rock). This composite gravel would total 2,500 cubic yards for both the soccer/field hockey and softball fields. The northeastern portion of the soccer/field hockey field would overlap with the renovated softball outfield, precluding the use of both fields at the same time during games/matches. It should be noted that the soccer and field hockey seasons (September through mid- February) do not overlap with softball season (mid-February to May). The side safety zones of the soccer/field hockey field would be approximately seven feet in width, while the end safety zones would be ten feet in width.

A removable, 20-foot high safety netting would be used along the northern and southern ends of the soccer/field hockey field during games and practices to help keep soccer balls from hitting the adjacent St. Christopher's School building to the north and from entering backyards of residences located along the southern boundary of the project site. The soccer/field hockey field would not include a public address system. Together, the construction of the soccer field and the renovation of the softball field are expected to take approximately four to five months.

An eight-foot high, black vinyl coated chain-link fence would be constructed along the Booksin Avenue frontage of the school site, approximately ten feet from the back edge of the existing sidewalk. The fence would have two, 12-foot wide, locked maintenance gates; one each at the southern and northern ends of the fence, as shown on Figure 4. No other types of access, including pedestrian access, would be allowed from Booksin Avenue to the project site.

Swimming Pool

The proposed swimming pool would be approximately 84 feet long by 75 feet wide with a 24 foot by 40 foot shallow swimming lesson area. The pool would be surrounded by a pool deck approximately 15 to 20 feet in width, as shown on Figure 4. Two, one-meter diving boards would be installed on the eastern side of the pool and bleachers would be provided on the pool deck. An approximately 2,000 square foot building would be constructed to the west of the swimming pool to be used for concessions, coach's offices, bathrooms, and the storage of field, pool, and mechanical equipment and pool chemicals. An outdoor shower area would be provided adjacent to the pool. The entire pool area, including the pool deck, would be surrounded by a six-foot tall, black wrought iron fence and landscaping as shown in Photos 3 and 4.

The swimming pool may be used in the summer for recreational swimming programs. The pool itself would include interior pool lighting and exterior overhead lighting to be used for early morning and late afternoon practices, as described below. A public address system would be used for competitive swim events only (approximately 20 per year). Pool construction is expected to take approximately five months to complete.

Softball Field

A softball field is currently located on the project site, as shown on Figure 3 and in Photo 5. The proposed project would include the renovation of this existing field to include relocation of the

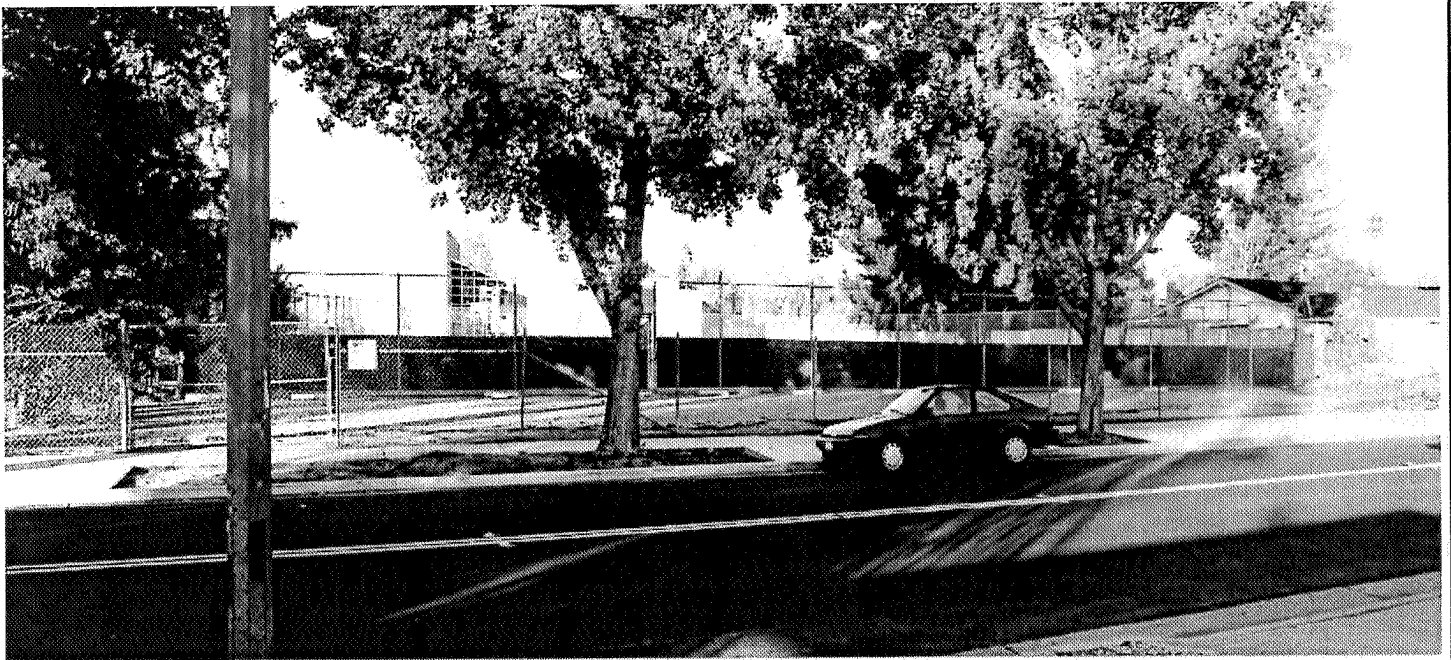


Photo 1 - Existing view of southwestern site frontage along Booksin Avenue, looking to the east. The existing tennis courts can be seen.

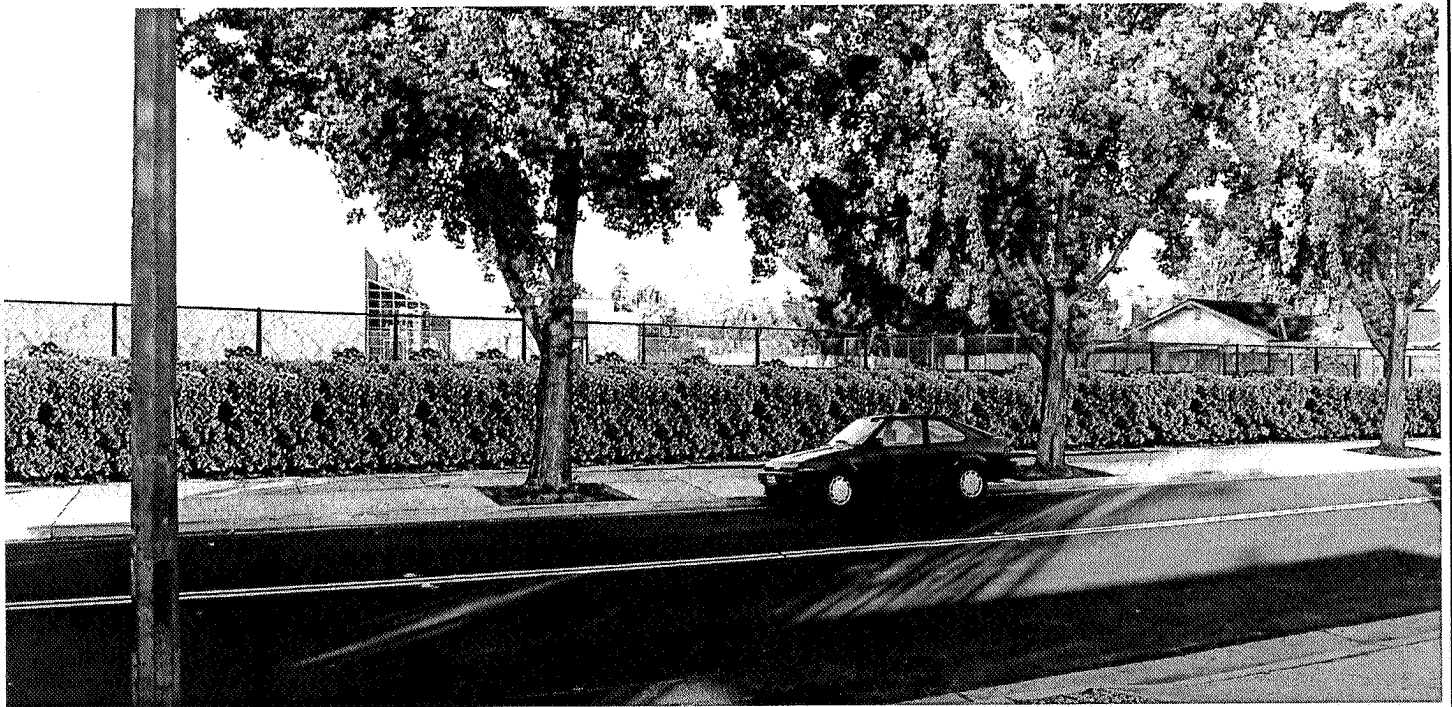


Photo 2 - Photo simulation of proposed 10-foot high vinyl clad fence and landscaping along Booksin Avenue. The fence and landscaping would span the entire western site frontage.



Photo 3 - Existing view of interior of project site and the proposed location of the swimming pool, looking to the southeast. The existing trailer would be relocated as part of the project.



Photo 4 - Photo simulation of proposed swimming pool area. The proposed office/equipment/concession building can be seen to the right. The pool construction includes a 6-foot high fence, landscaping, and lighting as shown.

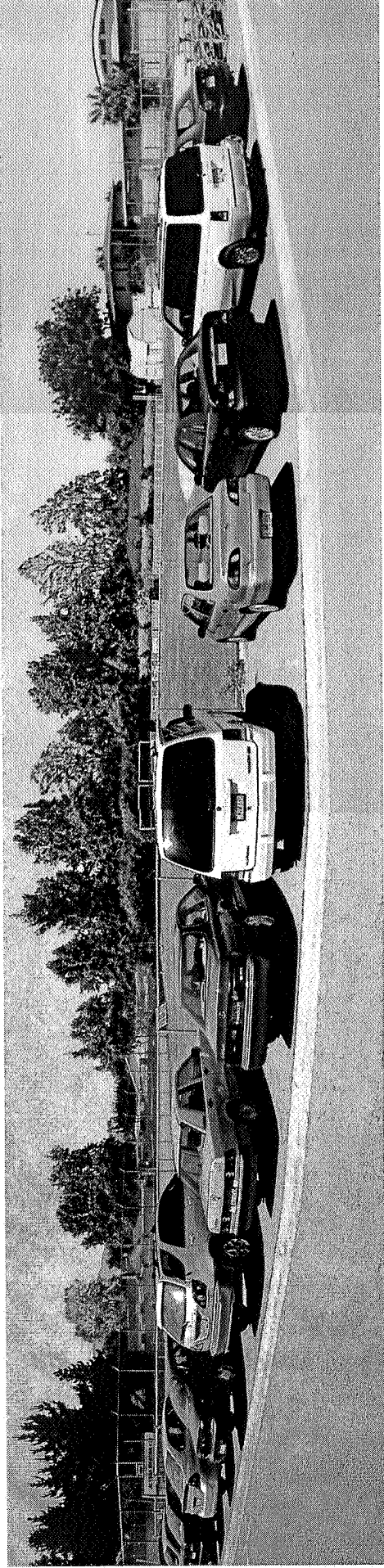


Photo 5 - View from within the Presentation High School site, looking to the west towards Booksin Avenue. The existing softball field and St. Christopher's School are to the right, while the tennis courts are to the left. The roof of one of the existing duplexes that would be demolished as part of the project in order to construct the soccer field, can be seen in the background of the photo.



Photo 6 - View of main entrance to school, looking to the east towards Plummer Avenue. This driveway would be widened as part of the proposed project.

existing 20-foot high, black vinyl backstop, new synthetic turf and track fines, bleachers, two batting cages, and a bull pen. A portable public address system is currently used for softball games; however, the project includes the installation of a permanent system to be used for softball games (approximately 20 per year). As previously described, the softball and soccer/field hockey fields would overlap; therefore, games/matches would not occur on both fields at the same time.

Internal Access/Parking

The existing school site includes a driveway system whereby visitors can enter and exit the site from the northernmost driveway on Plummer Avenue as well as exit from the southernmost driveway on Plummer Avenue (refer to Figure 3). The proposed project would not substantially change the existing internal access on the site; however, the existing northern driveway would be widened to 26 feet as part of the project, as shown on Figure 4 and in Photo 6. Two, locked access gates will be installed along Booksin Avenue for maintenance vehicles only. There will be no pedestrian access to the site from Booksin Avenue.

The project would not result in an increase in enrollment at the school and sporting events would occur after school, when most students and faculty have left for the day. However, the total number of parking spaces on the site would increase by eight, from 204 existing spaces to 212 spaces. The majority of parking spaces eliminated due to the construction of the pool would be relocated to the west of the existing gym and locker room buildings, in the northeast corner of the site on either side of the widened driveway, and on the southern side of the main classroom building, as shown on Figure 4 and in Photo 7. Buses used to transport visiting teams to the site will be parked on campus during sporting events. Access by emergency vehicles will remain as it is today.

Lighting

As described in the sections above, the proposed project includes lighting to allow early morning (no earlier than 6 a.m.) practices and evening (no later than 8 p.m.) practices/events at the swimming pool. Eight, 30-foot tall light poles are proposed for the swimming pool and pool deck, as seen in Photo 4. Each pole would have two, box-type fixtures each consisting of 1,000-watt lamps and forward throw reflectors. Lighting will only be required in the winter months (mid-September to mid-April), when days are shorter. All light poles would be powder-coated to reduce reflection during the day. No other event lighting is proposed for the project site.

Existing parking lot lights will be retained and additional lights will be provided in the new parking areas west of the gym, similar to those that already exist on site. These lights will be designed to reduce light spillover to adjacent land uses.

Landscaping

Landscaping, including trees, shrubs, and vines, would be installed throughout the project site. Approximately 54 trees would be planted on the project site in accordance with the City of San Jose's Tree Ordinance. Additional shrubs and vines would be planted adjacent to the proposed fences along Booksin Avenue and around the swimming pool, as shown in Photos 2 and 4.

Landscaping would be provided on the Booksin Avenue side of the fence, between the fence and the sidewalk, as shown in Photos 1 and 2. The large liquid amber trees located along Booksin Avenue would be retained and additional trees would be planted in the parking strip near the southwest corner of the site.

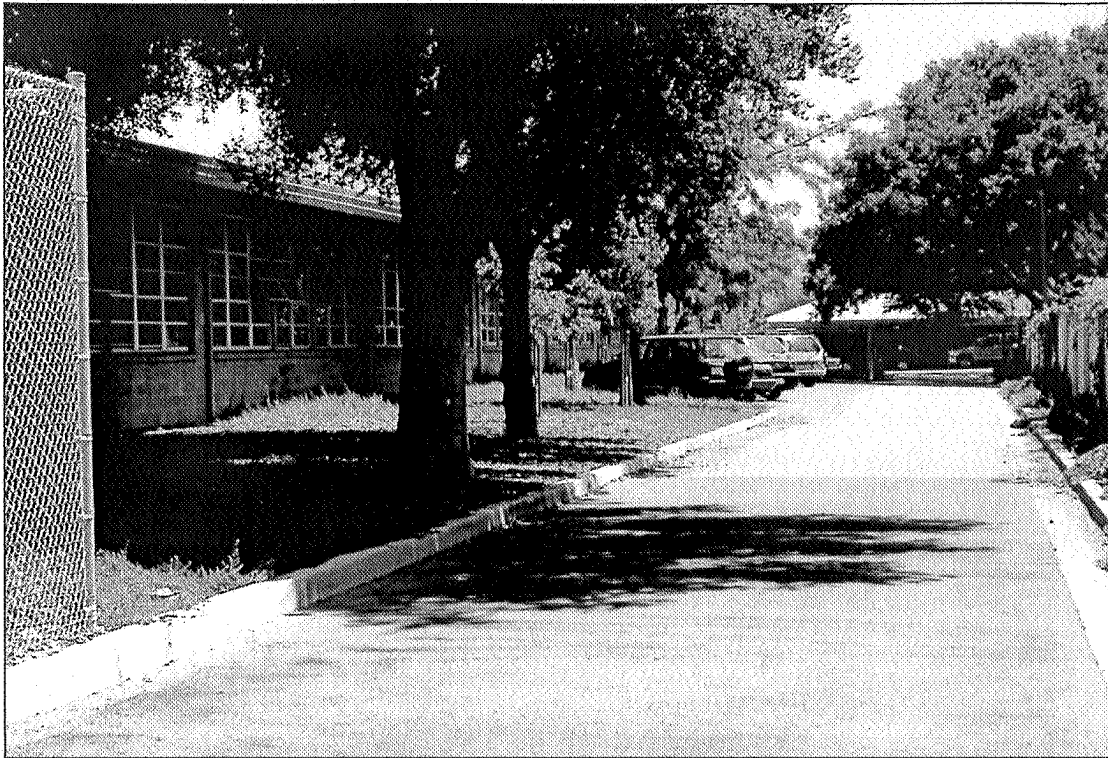


Photo 7 - View of the southeastern portion of the site. The existing parking shown would be reconfigured and enlarged to accommodate more parking. As a result the trees to the left would be removed.



Photo 8 - This photo of one of the two existing duplexes to be removed, was taken from Booksin Avenue, looking to the east.

Grading and Drainage

The project site slopes very gradually downward from the southwest to the northeast. Excavation would be required for the pool construction and grading of the softball/soccer field and installation of the artificial turf. A total of approximately 2,550 cubic yards of material would be removed from the site and deposited at either another construction site in need of soil, or an appropriate landfill.

With the removal of the existing tennis courts, total peak stormwater runoff from the southern portion of the site, which drains to the existing stormwater system within Plummer Avenue, would be reduced from 5.72 cubic feet per second (cfs) to 5.34 cfs. Construction of the project would result in a slight increase in stormwater runoff due to the replacement of landscaping areas with parking and the use of artificial turf fields, which are not as permeable as natural grass fields. Total peak flows are expected to increase from 10.4 cfs to 12.60 cfs; thereby requiring approximately 600 cubic feet of retention capacity. Therefore, the project includes the construction of a landscaped infiltration swale with a depth of two feet and 4:1 side slopes along the western boundary of the site between the back of the existing sidewalk and the soccer/field hockey field fence. This swale would provide approximately 1,000 cubic feet of retention capacity.

IV. CONSISTENCY WITH ZONING, PLANS, AND OTHER APPLICABLE LAND USE CONTROLS

A. ZONING DESIGNATION

The project site is zoned *R-1-8 Single-Family Residential*. Uses allowed would include single-family residences with one to eight dwelling units per acre. Private school uses are a conditional use within this zoning designation and the school was constructed on the site in 1962.

Consistency: The proposed project is consistent with the current zoning for the site, but requires a Conditional Use Permit in conformance with current City ordinances. The proposed project would require a new Conditional Use Permit in order to construct the proposed project. Therefore, the project is consistent with the zoning designation for the property.

B. CITY OF SAN JOSE GENERAL PLAN

The project site is designated *Public/Quasi-Public* on the City of San Jose 2020 General Plan Land Use Transportation Diagram. This category is used to designate public land uses, including schools.

Consistency: The proposed project is consistent with the City of San Jose General Plan because it is the construction of sports facilities on an existing private school campus.

C. SANTA CLARA VALLEY URBAN RUNOFF POLLUTION PREVENTION PROGRAM

The Santa Clara Valley Urban Runoff Pollution Prevention Program, previously called the Santa Clara Valley Non-point Source Program, was developed in accordance with the

requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban stormwater runoff. This program was also designed to fulfill the requirements of Section 304(1) of the Federal Clean Water Act, which mandated that the EPA develop National Pollutant Discharge Elimination System (NPDES) Permit application requirements for various stormwater discharges, including those from municipal storm drain systems and construction sites.

The State Water Resources Control Board implemented the NPDES general construction permit for the Santa Clara Valley. For properties of one acre or greater, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction. Subsequent to the implementation of the general construction permit, the San Francisco Bay Regional Water Quality Control Board issued a Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit to the municipalities in Santa Clara Valley, the County of Santa Clara, and the SCVWD as co-permittees. Under the provisions of the Municipal NPDES Permit, the City is required to take steps within its area of authority to reduce or eliminate pollutants in storm water to the maximum extent practical.

Consistency: Construction on the 8.8 acre site would be required to conform to the requirements of the NPDES permitting program. The construction of sports facilities would slightly increase the amount of stormwater runoff currently generated by the site; therefore the project includes construction of a landscaped infiltration swale on the site.

Potential impacts to the water quality of this runoff could occur during construction. Runoff-borne pollution and associated impacts will increase during construction on the site; however, standard BMPs consistent with the Municipal NPDES will be employed. The stormwater system for the site has been designed in such a way as to reduce the potential for water quality impacts. For these reasons, the proposed project would be consistent with the provisions of the Santa Clara Valley Urban Runoff Pollution Prevention Program.

V. ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

This section will describe the existing environmental conditions on or near the subject site, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, was used to identify environmental impacts that could occur if the proposed project is implemented. The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are provided at the end of the checklist. This section will clearly identify all potential environmental impacts for the project, including an explanation for those adverse impacts determined to be less than significant. Mitigation and avoidance measures are identified and described for all potentially significant impacts, and evaluated briefly for the expected effectiveness/feasibility of these measures, where necessary.

A. AESTHETICS

1. Setting

The project site is currently the location of an existing private high school (refer to Photos 1-8). The project area is urban in nature with residential uses being the primary land use. St. Christopher's Church and private school (Grades K-8) is located adjacent to the northwestern boundary and a health care facility (the Herman Sanitarium for Alzheimers patients) is located adjacent to the southeastern boundary of the site. The western portion of the project site is located along Booksin Avenue and is currently occupied by two duplexes (four units total, Photo 8), associated driveways and landscaping, and a fenced off parking area no longer used by the school. Tennis courts are currently located along the southwestern boundary of the site and are visible from Booksin Avenue.

2. Environmental Checklist and Discussion

AESTHETICS					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4, 6
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,15

Discussion: The project site is only visible from the immediately surrounding area. The primary visual change as a result of the project would occur from the Booksin Avenue frontage. The two existing duplexes would be removed and an eight-foot high fence would be constructed approximately 10 feet from the back edge of the existing sidewalk

(approximately 18 to 20 feet from the eastern edge of the street). Landscaping would be provided between the fence and the sidewalk. None of the existing street trees, which are approximately 40 to 50 feet in height, would be removed and additional trees would be planted along the southern reach of this frontage.

While the determination of aesthetic impacts is somewhat subjective, it is determined that this visual change would not result in a significant aesthetic impact to the surrounding residential uses. The existing duplexes would be replaced by a fence and landscaping (including trees) along Booksin Avenue and a soccer/field hockey field would be constructed on the other side of the fence. After the landscaping matures, the soccer field would not be visible from Booksin Avenue and the visual character along this frontage would be more open space in nature. In addition, the tennis courts and unused parking area located along the southern Booksin Avenue street frontage would be removed and replaced with the previously described fence and landscaping. Finally, the homes along Booksin Avenue are single-story; therefore, the existing uses on the site, including the softball backstop, which is located approximately 360 feet from the nearest residence, would not be visible from these land uses. For these reasons, the proposed project would not result in a significant adverse aesthetic impact to surrounding land uses.

Approximately 20 trees would be removed as part of the proposed project, as described in the Project Description and Section V. D. of this Initial Study. The majority of these trees are located within the backyards of the duplexes to be removed from the western portion of the site and also along the southern side of the main school building, where parking will be provided. These trees will be replaced on the site per the City of San Jose's Tree Ordinance. Therefore, the removal of these trees would not degrade the existing visual character of the site or its surroundings.

Lighting

The proposed project includes the installation of lighting at the swimming pool and the new parking areas as previously described in the Project Description section of this Initial Study. The lighting proposed for the swimming pool and parking lot areas would be similar in style to the existing lighting located throughout the site. This lighting would be designed so as to not result in the spilling of additional light onto residential land uses within the project area. In addition, ambient light levels within the neighborhood surrounding the high school would not significantly increase with the installation of pool or parking lot lighting. The site is located within an urban area and lighting is already generated by the existing lighting on the site and by lighting within the neighborhood, including street lamps. For these reasons, the installation of additional lighting on the site would not result in a significant adverse aesthetic impact to surrounding land uses.

3. Conclusion

The proposed project would not degrade or substantially change the existing visual character or quality of the site and its surroundings. The proposed lighting plan for the swimming pool would not result in a significant change in the ambient light levels within the project area. Therefore, the project would have a less than significant adverse aesthetic impact and no mitigation measures are required or proposed. **(Less than Significant Impact)**

B. AGRICULTURAL RESOURCES

1. Setting

The project site is located within urban San Jose and is not used in an agricultural capacity. The project site is designated as *R-1-8 Single-Family Residential* under the City of San Jose's Zoning Ordinance.

2. Environmental Checklist and Discussion

AGRICULTURE RESOURCES					
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3

3. Conclusion

The project would not have a direct adverse impact on agricultural land or agricultural activities either on the project site or in the project area. **(No Impact)**

C. AIR QUALITY

1. Setting

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and for photochemical pollutants, sunshine.

The Bay Area typically has moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution. These factors give the Bay Area a relatively high atmospheric potential for pollution. Of the three pollutants known to at times exceed the state and federal standards in the project area, two are regional pollutants. Both ozone and particulate matter (PM₁₀) are considered regional pollutants in that concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region. The third pollutant, carbon monoxide, is considered a local pollutant because elevated concentrations are usually only found near the source.

The Federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standards are not met as "non-attainment areas. Because of the differences between the national and state data standards, the designation of nonattainment areas is different under the federal and state legislation. Under the California Clean Air Act, Santa Clara County is a non-attainment area for ozone and particulate matter (PM₁₀). The County is either in attainment areas or unclassified for other pollutants.

2. Environmental Checklist and Discussion

AIR QUALITY					
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2,14
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
e) Create objectionable odors or dust affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 12

Discussion: The proposed project would not result in significant local or regional air quality impacts, since it is the construction of sports facilities at an existing high school and would not generate a significant number of additional vehicle trips within the project area.

The Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines identify projects likely to result in a significant air quality impact, for which an air quality impact analysis must be prepared. These projects are those that generate more than 2,000 vehicle trips per day. The proposed project does not exceed the criteria that would require such an analysis.

Construction activities such as demolition, excavation and grading operations, construction vehicle traffic, and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that would affect local and regional air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-waterbase paints, thinners, and some caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. It is estimated that construction activities would temporarily affect local air quality for a total of eight months (four months for the construction/renovation of the fields and four months for the construction of the pool), causing a temporary increase in particulate dust and other emissions, which may result in temporary nuisances to the adjacent residential land uses.

Mitigation and Avoidance: The BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to a level that is less than significant. The following construction practices would be implemented during all phases of construction on the project site:

- Use dust-proof chutes for loading construction debris and soil onto trucks.
- Water to control dust generation during site grading and break-up of existing pavement.
- Cover all trucks hauling debris and/or soil from the site, or require all truck to maintain at least two feet of freeboard.
- Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- Sweep daily (preferably with water sweepers) all paved roads, parking areas, and staging areas at the construction site and on adjacent public streets if visible soil material is carried onto these streets.
- Install gravelbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Limit vehicle traffic speeds on unpaved roads to 15 mph.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- The surrounding residents, health care facility, and school will be notified sufficiently prior to project grading. A construction monitor will be appointed to respond to questions and complaints and shall take corrective action within 48 hours.

The use of watering alone for dust control is estimated to reduce dust emissions by about 50 percent. The combined effect of the above measures, including the use of a dust suppressant, would have a control efficiency of 70 to 80 percent, which would be expected to reduce construction related air quality impacts to a less than significant level.

3. Conclusion

The proposed project would not create significant regional air quality impacts. Implementation of the above described mitigation measures will reduce short-term air quality impacts associated with the construction of the proposed project to a less than significant level. **(Less than Significant Impact with Mitigation Included in the Project)**

D. BIOLOGICAL RESOURCES

The following discussion is based upon a reconnaissance-level survey conducted at the project site by *David J. Powers & Associates, Inc.* and existing information regarding biological conditions within the project area. A tree survey was also conducted for the site by *David J. Powers & Associates, Inc.*

1. Setting

Biotic Resources on the Project Site

The project site is located within a highly developed area of central San Jose. The site is developed with school buildings, parking and driveways, tennis courts, a softball/playing field, and landscaping. The majority of the landscaped area is located in front of the school, along Plummer Avenue, and in the backyards of the existing duplexes in the western portion of the site.

Ornamental Landscape Habitat

Vegetation

Landscaping on the site is ornamental in nature and limited primarily to trees and the grassy playing field on the site. The majority of the trees are landscape varieties not native to California, with the exception of the two coast redwoods and the California black walnut tree, as discussed below. These trees have been significantly trimmed over the years and while the walnut tree and the redwood tree located in the central portion of the site are in fair condition, the redwood in the western portion of the site is in very poor condition.

Wildlife

Species that use landscaped sites, such as school properties, are typically able to adapt well to the alteration of habitats by humans. Some species typically found in landscaped habitats include European Starlings, Rock Doves, house mice, feral cats, and Norway rats. Native species that are able to use these habitats include Western fence lizards, American Robins, Brewer's Blackbirds, Northern Mockingbirds, Mourning Doves, House Finches, California ground squirrels, black-tailed hares, striped skunks, and opossums.

Nesting Raptors

The project site has large trees located in the western and central portions of the site. These trees may provide potential nesting habitat for breeding raptors, which are protected by the federal Migratory Bird Treaty Act (16 U.S.C. §703, Supp. I., 1989), which prohibits the killing, possessing, or trading in migratory birds except in accordance with regulation prescribed by the Secretary of the Interior.

Ordinance Size Trees

The City of San Jose Tree Ordinance defines an ordinance tree as "any woody perennial plant characterized by having a main stem or trunk which measures 56 inches or more in circumference (18 inches in diameter) at a height of 24 inches above natural grade slope". A tree survey was conducted for the site to measure the trees to be removed as part of the project. The results of this survey are shown in Table 2, and the tree locations are shown on Figure 5.



--- Project Boundary

⊗ Tree to be Removed

Note: Tree Numbers Correspond to Table 2.

TABLE 2: EXISTING TREES TO BE REMOVED			
Tree Survey #	Common Name	Diameter @ 24" above natural grade (Circumference)	Health
1	Chinese Pistache	21.5" (7")	Poor
2	Black Walnut	100" (32")	Fair
3	Coast Redwood	73" (23")	Poor: Multi-brached
4	Liquid Amber	61" (19")	Good
5	Apricot	22" (7")	Good
6	Chinese Pistache	80" (25")	Poor: Pollard-trimmed
7	Avocado	22" (7")	Poor
8	Apricot	36" (12")	Fair
9	Lemon	14" (5")	Poor
10	Coast Redwood	90" (29")	Good
11	Plum	41" (13")	Good
12	Crepe Myrtle	9" (3")	Good
13	Bradford Pear	5" (2")	Good
14	Bradford Pear	5" (2")	Good
15	Holly Oak	74" (25")	Good
16	Holly Oak	55" (18")	Good
17	Bradford Pear	5" (2")	Good
18	Bradford Pear	5" (2")	Good
19	Grevellia	51" (16")	Good
20	Bradford Pear	5" (2")	Good

2. Environmental Checklist and Discussion

BIOLOGICAL RESOURCES					
WOULD THE PROJECT:	IMPACT				SOURCES
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
e) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
f) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

Discussion: The project site is urban in nature and does not contain any sensitive or special status plant or wildlife species. Nesting raptors may nest and/or forage in some of the taller trees on the site, which would be removed from the site prior to project construction. Construction disturbance and the removal of trees on the site during the breeding season may result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. If possible, these trees would be removed between October and December, which is considered the non-nesting/breeding season for raptors in the South San Francisco Bay area. If it is not possible to schedule removal at this time, preconstruction surveys for nesting raptors will be conducted by a qualified ornithologist in order to ensure that no active raptor nests would be destroyed during tree removal. These surveys would be conducted according to all applicable California Department of Fish and Game requirements.

Of the 20 trees to be removed, seven are of ordinance size, including the California black walnut (#2), two coast redwoods (#3 and #10), one liquid amber (#4), one Chinese Pistache (#6), and two holly oaks (#15 and #16). Removal of seven or more ordinance size trees is considered a potentially significant impact by the City of San Jose. Therefore, as a part of this project, these trees will be replaced according to the City of San Jose's Tree Replacement Ratios, as presented in Table 3, below.

TABLE 3: CITY OF SAN JOSE TREE REPLACEMENT RATIOS		
Diameter of Tree to be Removed	Replacement Ratio	Replacement Tree Size
18" or greater	4:1	24" Box
12"-17"	2:1	24" Box
Less than 12"	1:1	15-gallon

Based upon the size of the trees to be removed as part of the project, Table 4 shows the tree replacement requirements for the project. The project proposes to plant the required 54 trees in various locations on the Presentation High School campus.

TABLE 4: PROJECT TREE REPLACEMENT		
	Existing Trees	Replacement
Number of trees 18" or greater	7	28
Number of trees 12"-17"	3	6
Number of trees less than 12"	10	10
TOTAL	20	44

3. Conclusion

The proposed project includes mitigation to replace trees according to the City of San Jose's Tree Ordinance. With implementation of this mitigation, the project would not result in significant impacts to biological resources on the project site. **(Less than Significant Impact with Mitigation Included in the Project)**

E. CULTURAL RESOURCES

The following discussion is based on an archaeological literature review conducted by *Holman & Associates* in May 2003 (Appendix A) at the Northwest Information Center located at Sonoma State University. The literature review was conducted to obtain information about recorded prehistoric and/or historic archaeological sites in and around the project area, and any records of previous archaeological field inspections of the project area or its surroundings.

1. Setting

According to the archaeological literature review, there are no prehistoric or historic archaeological sites recorded on or within a quarter mile of the project area. The project area has not been previously surveyed; therefore there are no records of any cultural resource field inspections for cultural resources in the vicinity of the site. As a result, it has been determined that the project site is located in a zone of low to moderate archaeological sensitivity.

2. Environmental Checklist and Discussion

CULTURAL RESOURCES					
WOULD THE PROJECT	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5 of the CEQA Guidelines?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 4

Discussion: No recorded sites are located in the project area and the site is located in a zone of low to moderate archaeological sensitivity. While there is always a chance that cultural resources could be discovered during subsurface grading and excavation, the probability of encountering such materials on the site is low. Therefore, mechanical subsurface testing for cultural resources prior to construction is not recommended and archaeological monitoring of future earthmoving and/or excavation is not required.

3. Conclusion

The proposed project would not result in significant impacts to cultural resources. Therefore, no mitigation measures are required or proposed. (**Less than Significant Impact**)

F. GEOLOGY AND SOILS

The following discussion is based on a Soil and Foundation Investigation prepared for the construction of a new classroom/theater building located in the southcentral area of the site by *Advance Soil Technology, Inc.* (July 2000). The purpose of this report was to determine the existing soil conditions underlying the project site, their physical properties, and provide recommendations for grading and foundation design based on the laboratory analyses of materials encountered on the site. This investigation can be found in Appendix B of this Initial Study. Additional information was obtained from the Cooper-Clark, Geotechnical Investigation of San Jose, 1974.

1. Setting

Topography and Soils

The project site is located in the Santa Clara Valley between the Santa Cruz Mountains to the west and Diablo/Mount Hamilton Range to the east. The valley trends north to south, and is typified by flat, mostly urbanized terrain cut by northward-draining rivers and creeks. The project site is located in the Willow Glen area of central San Jose, which is a relatively flat portion of the Valley. The site is relatively flat and has an elevation of approximately 160 feet above mean sea level.¹

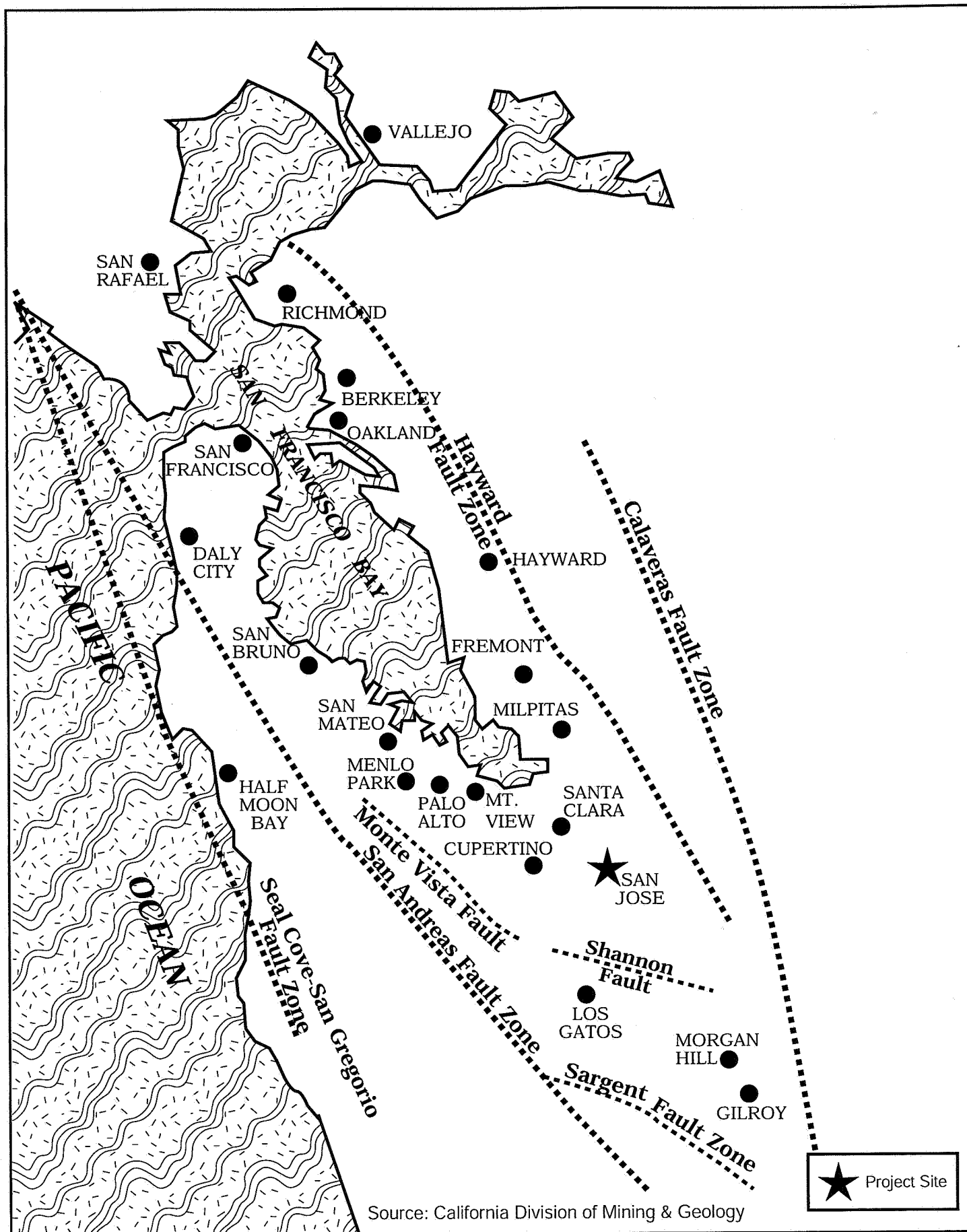
Soils encountered during site exploration for the classroom/theater building generally consisted of dark brown silty clay with rootlets due to the existing landscaping and extended to a depth of approximately 3.5 to 4 feet (mostly fill material) below the existing ground surface. At this depth, a medium brown silty sandy gravel was encountered which extended to a depth of approximately 12.5 to 13 feet below the existing ground surface. Soils on the site are moderately expansive with no landslide susceptibility or erosion potential (Cooper Clark, 1974).

Seismicity

The project site is located in the seismically active Santa Clara County, which is designated as Seismic Activity Zone 4 (most seismically active zone in the United States) by the Uniform Building Code. In addition, the site is located within a California State Seismic Hazard Zone, as mapped by the State Department of Conservation, Division of Mines and Geology (San Jose West USGS quadrangle).

The San Andreas Fault is located approximately 6.2 miles southwest of the project site, while the Calaveras and Hayward Faults are located approximately 12.3 and 8.5 miles to the northeast, respectively. Review of the USGS Survey Maps of the San Francisco Bay Region indicates that the site is located outside of any special study zones defined by the Alquist-Priolo Geologic Hazards Act of 1972. The site is not located within the State of California's Seismic Hazard Zone. Since no major faults have been mapped in the immediate vicinity of the site, the likelihood of ground rupture from faulting across the site is low (refer to Figure 6).

¹ San Jose West, California, USGS 7.5-minute topographic quadrangle.



FAULTS OF CONCERN IN THE SAN FRANCISCO BAY AREA

FIGURE 6

Liquefaction

Soil liquefaction is a phenomenon in which generally saturated, cohesionless soils undergo a temporary decrease in strength during earthquake ground shaking and acquire a degree of mobility sufficient to permit ground deformation. In extreme cases, the soil particles can become suspended in groundwater, resulting in the deposit becoming mobile and fluid-like. To evaluate the liquefaction potential at the project site, soil samples were taken at various depths to identify the characteristics of the sub-surface soil underlying the site. The soil encountered did not reveal clean, loose, saturated, uniformly graded, or fine grained soils. Soils were firm to stiff in consistency. Therefore, it has been determined by the project geologist that the possibility of liquefaction at the site is low.

2. Environmental Checklist and Discussion

GEOLOGY AND SOILS					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5, 6, 11, 13
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5, 11
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5, 6, 11
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5, 6
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5

Discussion: It is expected that the project site would be subject to significant seismic events over the life of the project; however, fault rupture is not expected to occur on the site. Soils on the site are moderately expansive with no landslide or erosion potential and the potential for liquefaction on the site is low.

The proposed project would result in the excavation of approximately 2,550 cubic yards of soil for the construction of the proposed swimming pool and softball/soccer fields. The soil will be exported off the site to either an appropriate landfill or to another construction site. It is not expected that the proposed soccer/field hockey field and renovated softball field would be significantly affected during a significant seismic event. The swimming pool may sustain some damage; however, it is unlikely that the damage would result in the exposure of people to significant safety hazards. Regardless, the pool would be constructed according to all state and local ordinances and regulations.

3. Conclusion

The proposed project would not result in significant soils or geologic impacts. Therefore, no mitigation measures are required or proposed. **(Less than Significant Impact)**

G. HAZARDS & HAZARDOUS MATERIALS

This section is primarily based upon a July 2003 Chemical Usage report prepared by *Arch.PAC, Swimming Pool Designers*, for the proposed project. The report is Appendix C of this Initial Study.

1. Setting

The project site is a high school campus with classroom/administration buildings, a theater, a gymnasium with locker room, a chapel, tennis courts, softball field, parking/driveways, landscaping, and two duplexes. There are no underground storage tanks on the site.

2. Environmental Checklist and Discussion

HAZARDS & HAZARDOUS MATERIALS					
	IMPACT				SOURCE
WOULD THE PROJECT	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 16
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 16
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

☐☐☒☐

1

Discussion: The project site is not located within the Santa Clara County Airport Land Use Commission's jurisdiction; nor is it within an area that will interfere with or affect the City's emergency response plan or designated evacuation routes. The project site is not subject to wildfires.

The project includes the demolition of two duplex structures and four tennis courts. Due to the age of the structures (built 1965-70), it is not expected that asbestos-containing materials will be encountered during demolition. However, should asbestos containing materials be discovered, they will be removed by a licensed contractor according to all local, state, and federal regulations.

The project includes the construction of a swimming pool which will require the use and transportation of chemicals for its maintenance. The chemicals expected to be used include liquid chlorine and compressed carbon dioxide. Chlorine is used to sanitize the water and oxidize any foreign material in the pool. Carbon dioxide is used to increase equipment longevity and to provide the chlorine with the necessary conditions that enable it to function as a sanitizer. The chemicals would be stored in separate, ventilated rooms within the building adjacent to the swimming pool; the chlorine in a dual-containment storage vessel and the carbon dioxide in a stainless steel pressurized tank.

The chemicals would be dispersed into the pool by way of the maintenance system which pumps water into and out of the pool through a series of pipes. Chemicals would be added to these waters so that they will be sufficiently diluted before entering the pool itself. The storage room, as well as the entire pool maintenance system, would be monitored for chemical leakage and maintained by a trained commercial pool operator. In addition, the project includes the use of a computerized Chemical Control Monitor to monitor and control the chemical balance of the pool water 24 hours a day.

The operation of the proposed swimming pool would require the storage, use, and transportation of chemicals on the project site. The storage, use, and transportation of these chemicals would be conducted in accordance with local, state, and federal laws and regulations to ensure that the use of these chemicals would not result in a significant hazardous materials impact.

3. Conclusion

The proposed project would not result in significant impacts associated with the storage, use, or transportation of hazardous materials. **(Less than Significant Impact)**

H. HYDROLOGY AND WATER QUALITY

This section is primarily based upon an August 2003 Hydraulic and Stormwater Analysis prepared by *Rajappan & Meyer, Consulting Engineers*, for the proposed project. The report is Appendix D of this Initial Study.

1. Setting

There are no hydrologic features located within the project area. The nearest waterways are Los Gatos Creek, approximately 0.5 miles to the northwest, and the Guadalupe River, approximately 1.1 miles to the east of the site. According to the Federal Emergency Management Agency's Flood Insurance Rate Maps (Panel No. 060349 0037D), the project site is not located within a 100-year floodplain.

2. Environmental Checklist and Discussion

HYDROLOGY AND WATER QUALITY					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 17
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 17
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 17
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7

h)	Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7
j)	Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Discussion:

Stormwater Drainage

The 8.8-acre project site is currently developed with high school uses, including classrooms, a gymnasium with locker room, landscaping, parking, tennis courts, softball field, and two duplexes. As previously discussed, the proposed project would reduce stormwater runoff to the storm drain system in the southern portion of the site. However, stormwater runoff would increase to the storm drain system in the northern portion of the site. Therefore, the project includes the construction of a 1,000 cubic foot, landscaped infiltration swale along the western boundary of the project site.

Water Quality

Stormwater from urban uses contains metals, pesticides, herbicides, and other contaminants such as oil, grease, lead, and animal waste. To reduce contamination of storm water runoff during construction, a National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges was established. The Nonpoint Source Program was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan.

Grading and excavation activities may result in temporary impacts to surface water quality by increasing the potential for sedimentation during construction. Surface runoff that may flow across the site during construction would discharge into the existing drainage located within the existing storm drains within the surrounding public streets. The project will comply with the applicable requirements of the Santa Clara Valley Urban Runoff Pollution Prevention Program's (SCVURPPP) NPDES permit and the City of San Jose Municipal Code. Best Management Practices will be employed, such as the use of effective sediment control features, the covering of disturbed surfaces, and the regular sweeping of paved construction areas, as described in Section V. C. Air Quality, of this Initial Study.

3. Conclusion

The proposed project includes mitigation to avoid or reduce potential water quality impacts to a less than significant level both during and after construction. **(Less than Significant Impact)**

I. LAND USE

1. Setting

The project site is located within the urban Willow Glen area of central San Jose. Land uses in the project area are primarily residential; however, St. Christopher's Church and school (grades K-8) is located adjacent to the northwestern boundary of the site and the Herman Sanitarium (a health care facility for Alzheimer's patients) is located adjacent to the southeastern boundary of the site. Approximately eleven single-family residences are located adjacent to the boundaries of the school property; six to the north and five to the south. Other single-family residences are located across Plummer and Booksin Avenues to the east and west, respectively.

2. Environmental Checklist and Discussion

I. LAND USE					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 9, 10
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 9, 10
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 9

Discussion: The project would result in the demolition of four tennis courts and two duplexes in the western portion of the site in order to construct a soccer field. A swimming pool would be constructed near the middle of the site and would only be visible from the second stories of homes located to the north of the site. It would not be visible to any other surrounding land uses or public streets. The proposed project would not divide an established community, nor would it conflict with an applicable habitat conservation plan. As previously described, the project is consistent with the City of San Jose's 2020 General Plan and Zoning Ordinance.

The high school was constructed in 1962, which was prior to the construction of some of the homes in the project area. Sports facilities currently exist on the site. While the construction of additional sports facilities on the site may result in an increase in noise during practices and competitions, they are compatible uses for an existing school site within an area of residential, school, and health facility uses. In addition, the project does not include the lighting of the softball or soccer fields; therefore, activities at these venues would cease after dark.

3. Conclusion:

The proposed project would not result in significant impacts associated with land use compatibility. **(Less than Significant Impact)**

J. NOISE

This section is primarily based upon an August 2003 noise report prepared by *Illingworth & Rodkin, Acoustical Engineers*, for the proposed project. The report is Appendix E of this Initial Study.

Noise is measured in "decibels" (dB) which is a numerical expression of sound levels on a logarithmic scale. A noise level that is ten dB higher than another noise level has ten times as much sound energy and is perceived as being twice as loud. Sounds less than 5 dB are just barely audible, and then only in the absence of other sounds. Intense sounds of 140 dB are so loud that they are painful and can cause damage with only a brief exposure. These extremes are not commonplace in our normal working and living environments. An "A-weighted decibel" (dBA) filters out some of the low and high pitches which are not as audible to the human ear. Thus, noise impact analyses commonly use the dBA.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, Federal, State, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as **Leq**, and **Ldn**.² Using one of these descriptors is a way for a location's overall noise exposure to be measured, realizing of course that there are specific moments when noise levels are higher (e.g., when a jet is taking off from San Jose International Airport or a leafblower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows or in the middle of the night). For this report the **Ldn** will be used as it is consistent with the guidelines of the City of San Jose.

Applicable Standards and Policies

The City of San Jose's General Plan contains policies and goals which pertain to desired noise levels for various land uses located within the City. These policies and goals are expressed in terms of the **Ldn**. The General Plan cites long-term and short-term exterior **Ldn** goals for residential uses of 55 dBA and 60 dBA, respectively. For new commercial and new residential land uses, where the **Ldn** at a given location is above 60 dBA, an acoustical analysis is required to determine the amount of attenuation necessary to achieve an interior **Ldn** of 45 dBA or less. Outdoor uses on sites where the **Ldn** is above 60 dBA should be limited to acoustically protected areas.

The General Plan also distinguishes between noise from transportation sources and noise from non-transportation (i.e., stationary) sources. The short-term exterior noise goal is 60 dBA **Ldn** for transportation sources. For stationary sources, the exterior noise goal is 55 dBA **Ldn** at the property line between sensitive land uses (e.g., residences, schools, libraries, hospitals, etc.) and non-sensitive land uses (e.g., industrial, commercial, etc.).

1. Existing Noise Environment

Long-term noise measurements were conducted on May 20-21, 2003 at three locations for the purpose of quantifying typical daytime and nighttime noise levels at residences located adjacent to Presentation High School. The measurement locations are shown on Figure 7. Measurement LT-1 was conducted at the southeast corner of the existing tennis courts. Measurement LT-2 was conducted at the southwest corner of Presentation High School property line, approximately 57 feet from the centerline of Booksin Avenue. Measurement

² **Leq** stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. **Ldn** stands for Day-Night level and is a 24-hour average of noise levels, with 10-dB penalties applied to noise occurring between 10 p.m. and 7 a.m.

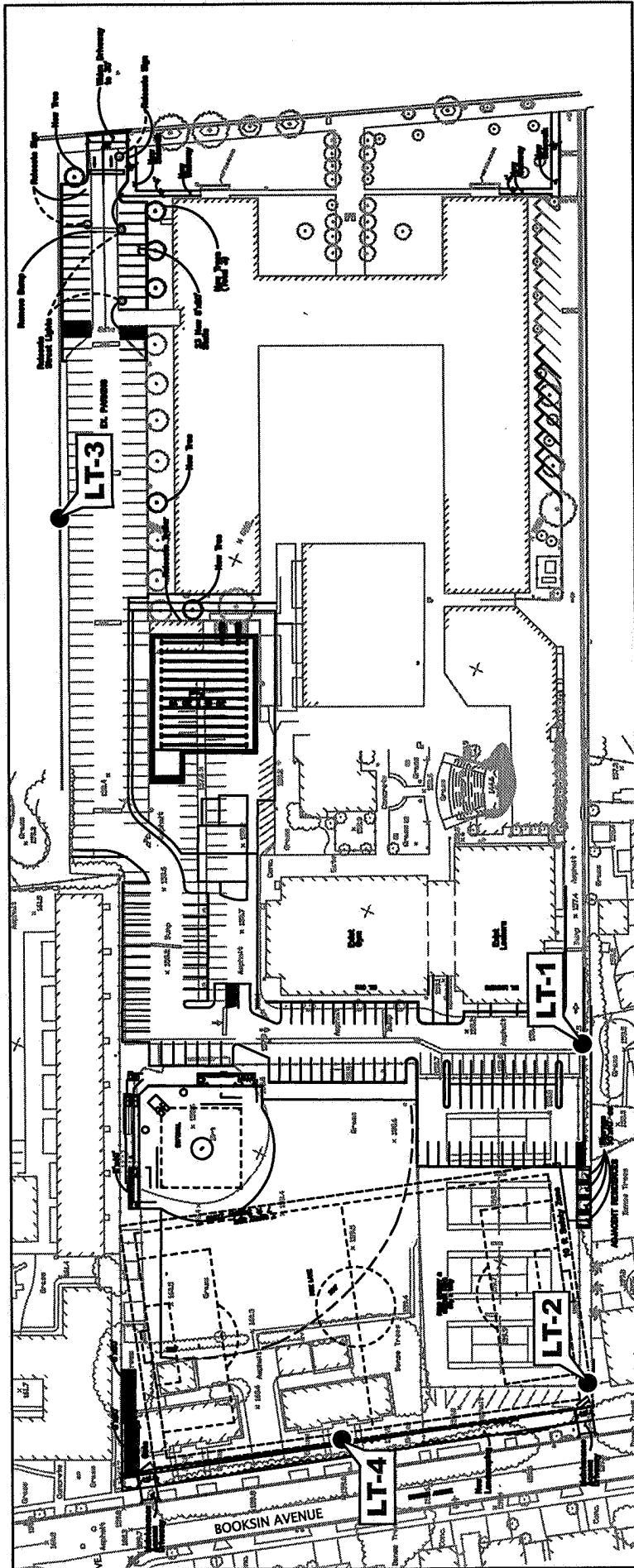


FIGURE 7

LT-3 was conducted at the western end of the existing Presentation High School faculty parking lot. Measurement results are shown in Table 5.

TABLE 5: EXISTING NOISE LEVELS	
Location	Noise Level
LT-1	52 Ldn
LT-2	58 Ldn
LT-3	60 Ldn

These existing noise levels are typical of those found in suburban neighborhoods throughout San Jose. Sources of noise include traffic, outdoor recreational activities, outdoor maintenance (e.g., lawnmowing, leafblowing, etc.), and human conversation. These noise sources apply not only to the residences but also to Presentation and St. Christopher's Schools, with the notable difference being a higher degree of outdoor recreational activities at the schools.

2. Environmental Checklist and Discussion

NOISE					
WOULD THE PROJECT:	IMPACTS				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 14
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 14
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 14
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Discussion: For the purpose of determining the significance of the noise impacts of the proposed project, the City's standard threshold of an increase of greater than 3 dBA Ldn was utilized. The City's goal of 55 dBA Ldn or less at the property line was also utilized.

As part of the noise study, *Illingworth & Rodkin* conducted measurements of the noise generated by softball and soccer games and at pool facilities located throughout the Bay Area. Noise measurements were conducted for practices and league events, as well as for playoff games, the latter having typically higher (i.e., worst-case) noise levels.

Softball Noise

The nearest residences are located approximately 240 feet to the west and south of the softball infield. At this distance, noise levels during softballs games would average 50 dBA, with maximum noise levels due to shouting from players and/or spectators being approximately 58 dBA. As previously described, a portable PA system is currently used at the existing softball field. The proposed project would include the installation of a permanent system to be used only for games (a total of approximately 30 games per year between early February and mid-May). It is expected that the PA would be used for a total of approximately 2.5 hours per game, until approximately 6 p.m. PA-generated noise would be below the maximum noise levels associated with shouting. These softball-related noise levels would be approximately equal to, or slightly less than, noise levels currently generated by traffic on Booksin Avenue.

The effect of softball games on the existing Ldn at the closest residences would be minimal; increases to the Ldn would be less than one decibel. Further, the Ldn generated by softball activities would not exceed 55 dBA at either the westerly or southerly property lines.

Based on the above analysis, it is concluded that the operation of the proposed softball field would not result in significant noise impacts on the surrounding residential land uses.

Soccer/Field Hockey Noise

The nearest residences are located approximately 160 feet to the west and south of the center of the soccer/field hockey field. At this distance, noise levels during soccer or field hockey games or practice would average 57 dBA. For residences to the west, these noise levels would be approximately equal to noise levels currently generated by traffic on Booksin Avenue. For residences to the south that are shielded from traffic noise on Booksin Avenue, these soccer/field hockey noise levels would be approximately 6 to 9 dBA higher than existing noise levels.

The effect of soccer/field hockey activities on the existing Ldn at the closest residences to the west would be less than one decibel. The effect of soccer/field hockey activities on the existing Ldn at the closest residences to the south would be an increase of roughly two decibels. These increases would not be significant.

The Ldn generated by soccer/field hockey activities would not exceed 55 dBA at either the westerly or southerly property lines. A public address system would not be used for soccer/field hockey matches.

Based on the above analysis, it is concluded that the operation of the proposed soccer/field hockey field would not result in significant noise impacts on the surrounding residential land uses.

Swimming Pool Noise

The nearest residences are located approximately 70 feet to the north of the proposed swimming pool. At this distance, noise levels during swim meets would average 55-60 dBA, with maximum noise levels due to shouting and cheering from swimmers and/or spectators ranging from 61-66 dBA. PA-generated noise would be in the same range as the maximum noise levels generated by the pool uses. It is anticipated that the PA would be used at the pool for approximately 12 water polo games between early September and mid-November and for approximately 10 swim meets between early March and mid-May. It is expected that the PA would be used for a total of approximately 2.5 hours per game/meet, until approximately 6 p.m.. The PA system would not be used for practices.

The effect of swimming pool activities on the existing Ldn at the closest residences would be minimal; increases to the Ldn would be less than one-half of a decibel. Further, the Ldn generated by pool activities would not exceed 52 dBA at the northerly property line.

Based on the above analysis, it is concluded that the operation of the proposed swimming pool would not result in significant noise impacts on the surrounding residential land uses.

Parking Lot Noise

Parking is proposed for the south side of the site adjacent to the existing gymnasium and locker room to replace parking due to construction of the proposed swimming pool. Additional parking spaces would also be constructed along the southern side of the existing classroom building in the southeastern portion of the site. The removal of the existing tennis courts would eliminate the noise generated by tennis and parking is currently allowed along the eastern boundary of the tennis courts. Noise generated in the parking lot would be from vehicles circulating within the lot, engine starts, door slams and the sound of human voices.

The hourly average noise level resulting from the noise generating activities of a parking lot would range between 40 and 50 dBA at the southern property line. At the nearest residences, parking lot noise levels would generally fall below ambient noise levels, although these sounds would be audible. The proposed parking lot would not significantly increase Ldn noise levels above existing levels and Ldn noise levels generated by the parking lot would not exceed 55 dBA at the property line. The additional parking proposed for the southeastern portion of the site would not increase noise levels above those that are currently generated by the existing parking in that location.

Noise after Removal of the Duplexes

Duplexes are located along Booksin Avenue that would be demolished and replaced by a soccer/field hockey field as part of the proposed project. Ambient noise levels were monitored along Booksin Avenue as shown on Figure 7. Noise along Booksin is generated primarily by traffic and the measured Ldn was 58 dBA. The analysis of softball field noise levels concludes that the noise from softball would be substantially below the Booksin Avenue traffic noise, assuming the duplexes are removed. Because the projected noise levels from games would be substantially below traffic noise (which is generated on the western side of the duplexes, away from the school), removal of these buildings would not cause a significant difference in noise from the softball fields.

There may be occasional audible sounds during lulls in traffic which would not now be heard because of the buffering provided by these duplexes; however, there would be no difference in measured noise levels at the Booksin Avenue residences on the western side of the street. Similarly, the analysis of noise from soccer games assumed the proposed location of the soccer fields where the duplexes currently exist. No credit for sound buffering was included in the analysis for the presence of the duplexes.

Construction Noise

The construction of the project would generate noise and would increase noise levels at adjacent receptors. The major noise generating activities associated with project construction would include the demolition of existing structures, site preparation, excavation, and grading, installation of project infrastructure, construction of the playfields and pool, and the expansion and reconfiguration of the parking lots.

Demolition and construction of the pool and fields are expected to take four months each, and could occur months apart depending on funding. Noise levels are expected to be highest during the demolition of the existing structures and excavation and construction of the pool. Typical hourly average construction-generated noise levels are about 81 dBA to 89 dBA measured at a distance of 50 feet from the center of the site during busy construction periods. Construction generated noise levels drop off at a rate of about six dBA per doubling of distance between the source and receptor. Shielding provided by buildings or terrain result in much lower construction noise levels at distant receptors.

Given the proximity of adjacent residential land uses to the construction activities, all phases of project construction would exceed ambient noise levels at these adjacent receptors, and may interfere with normal activities during busy construction periods. While this impact would be temporary, it is considered to be potentially significant given the sensitive uses located adjacent to the site.

Mitigation and Avoidance: Implementation of the following mitigation measures will avoid or reduce potential noise impacts to a less than significant level:

- A "Noise Disturbance Coordinator" will be designated who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint and require that reasonable measures be implemented to correct the problem.
- The surrounding residents shall received written advanced notification of construction, alerting them of planned construction activities, including the overall duration of the various construction stages. The notification will occur no later than 48 hours prior to the start of construction at the project site and would include contact information for the Noise Disturbance Coordinator.
- Construction operations (including truck traffic) will comply with all City ordinances, and shall be restricted to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, unless otherwise expressly allowed in the development permit or other planning approval for the project (Title 20, City of San Jose Municipal Code).
- Temporary noise barriers to shield adjacent noise-sensitive land uses from construction noise shall be constructed prior to the demolition phase of the project. These barriers will be at least eight feet in height.
- Equipment will be properly maintained and all available noise suppression devices, including mufflers, will be used.

- Staging of construction equipment and unnecessary idling of equipment adjacent to surrounding land uses will be prohibited. All construction equipment will be parked on-site and not on surrounding residential streets.
- All construction truck traffic will be routed along major arterials and traffic on residential streets will be prohibited where feasible.

3. Conclusion

Implementation of the above-described mitigation measures would avoid or reduce potential construction noise impacts to the surrounding area to a less than significant level. **(Less than Significant Impact with Mitigation Measures Included in the Project)**

K. POPULATION AND HOUSING

1. Setting

The proposed project is the construction of sports facilities on an existing private high school campus in central San Jose. Two duplexes (a total of four dwelling units) are currently located on the western boundary of the site. These duplexes are occupied by a Presentation sister and the groundskeeper for the school.

2. Environmental Checklist and Discussion

POPULATION AND HOUSING					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Induce substantial growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 9
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
c) Displace substantial numbers of existing people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

Discussion: The proposed project would not result in population growth within the project area, nor would it result in the extension of utilities or roadways to the site. The project would require the removal of two duplexes. The two inhabitants of the duplexes will be relocating.

3. Conclusion

The proposed project would not result in significant adverse impacts on population and housing within the project area or regionally. No mitigation measures are required or proposed. (**Less than Significant Impact**)

L. PUBLIC SERVICES

1. Setting

The proposed project is located within the City of San Jose. Fire, police, and emergency services are provided by the City of San Jose.

2. Environmental Checklist and Discussion

PUBLIC SERVICES					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
i) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
ii) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
iii) School facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Discussion: The proposed project is the construction of a soccer/field hockey field and swimming pool and the renovation of an existing softball field. The project would not change the number of students on campus. Practices and sporting events that currently are being held off-site would be held on the Presentation High School campus. Therefore, the project would not result in an increase in the demand for fire, police, school, parks, or other public facilities.

Access to the site for emergency personnel would improve due to the proposed widening of the existing main driveway along Plummer Avenue. Internal access at the site would not change as a result of the project. Adequate water supply to fight fires is provided by existing fire hydrants located adjacent to the project site on Plummer and Booksin Avenues. The nearest fire stations to the project site are shown in the table below.

TABLE 6: NEAREST FIRE STATIONS		
Station Number	Address	Distance (Miles)
6	1386 Cherry Avenue	1.4
9	3410 Ross Avenue	2.4
13	4380 Pearl Avenue	2.7

The proposed project may result in a decrease in the use of nearby city parks and public school-owned fields and swimming pools by Presentation High School students. Currently, students travel to other sports facilities for soccer/field hockey and swim practices and games/meets. Constructing such facilities on the Presentation campus may reduce overall demand for these city and public school-owned facilities in the project area.

3. Conclusion

The proposed project would not result in an increase in the demand for public services within the project area and may reduce demand for parks facilities. Therefore, no mitigation measures are proposed or required. **(Less than Significant Impact)**

M. RECREATION

1. Setting

The proposed project is the construction of additional sports facilities on an existing high school campus in San Jose.

2. Environmental Checklist and Discussion

RECREATION					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Discussion: As discussed in the previous section, the proposed project may result in a decrease in the demand for city and public-school owned sporting facilities by constructing such facilities on the Presentation High School campus. The swimming pool proposed as part of the project may be made available for public or private swim instruction.

3. Conclusion

The project would not result in adverse impacts to recreational facilities. No mitigation measures are required or proposed. **(No Impact)**

N. TRANSPORTATION/TRAFFIC

The following discussion is based on a traffic study prepared by *Hexagon Transportation Consultants, Inc.*, in April 2003. This traffic study is contained in Appendix F.

1. Setting

The project site is located between Booksin and Plummer Avenues, approximately 600 feet south of Curtner Avenue in the Willow Glen area of central San Jose. Current access to the school is provided by two driveways on Plummer Avenue. The northern driveway is 20 feet wide and accommodates two-way traffic into and out of the main parking area on the site. The southern driveway is 15 feet wide and accommodates one-way, outbound traffic. There is a circulation driveway behind the school buildings that connects the two driveways and the existing parking area.

A passenger loading area is provided on Plummer Avenue along the school frontage. This loading zone is marked with a white curb and signs. Off-campus parking is allowed along the adjacent residential streets to the east of the campus. The school does not provide buses for daily transportation. VTA bus service is provided on Curtner Avenue to the north of the campus.

Existing Traffic Conditions

Two methods were used to evaluate existing traffic operations at the high school. First, field observations were performed both before and after school to determine parking and traffic flows on the surrounding streets, as well as on the project site. Second, levels of service (LOS) calculations were conducted for the PM peak hour (4 p.m. to 6 p.m.) at intersections in the project area.

Field Observations

It was observed that school traffic peaks for approximately 20 minutes after school. During the peak period in the afternoon (approximately 2:40 to 3:00 p.m.), traffic congestion on Plummer Avenue is significant. This congestion is caused by vehicles turning in and out of the school's driveways, students crossing Plummer Avenue to access their cars parked in the adjacent neighborhood, and parents loading students while queued on Plummer Avenue. Delay runs on Plummer Avenue during the PM peak period revealed that the delay for through traffic due to congestion was seldom more than one minute. Although conditions are congested, traffic does circulate and dissipate in a reasonable amount of time. It appears that the surrounding neighborhood has adapted to the peak hour traffic in front of the school by using alternate routes.

A seven-day traffic count was conducted on Plummer Avenue, adjacent to the high school. Volumes were highest in the morning when school starts and in the afternoon when school lets out. Volumes were lower in the later afternoon and evening and much lower on weekends.

Level of Service Calculations

LOS calculations were not performed for the AM peak hour since the proposed sporting facilities would not generate traffic in the morning. The following intersections were evaluated for the PM peak hour:

- Curtner Avenue/Booksin Avenue (signalized)
- Curtner Avenue/Plummer Avenue (stop controlled on Plummer Avenue)
- Curtner Avenue/Cherry Avenue (signalized)

The three study intersections currently operate at acceptable levels of service, as shown in Table 7, below. Background conditions (existing plus approved projects in the project area) are identical to existing conditions because there are no approved projects in the area. According to the peak hour signal warrant, a traffic signal is not warranted at the Plummer Avenue/Curtner Avenue intersection.

TABLE 7: EXISTING AND BACKGROUND CONDITIONS LOS				
Intersection	Peak Hour	Count Date	Average Delay	LOS
Booksin/Curtner	PM	3/13/03	4.3	A
Plummer/Curtner	PM	3/13/03	10.3	B
Cherry/Curtner	PM	3/13/03	9	B

2. Environmental Checklist and Discussion

TRANSPORTATION / TRAFFIC					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 14
b) Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 14
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 14

e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 14
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 14

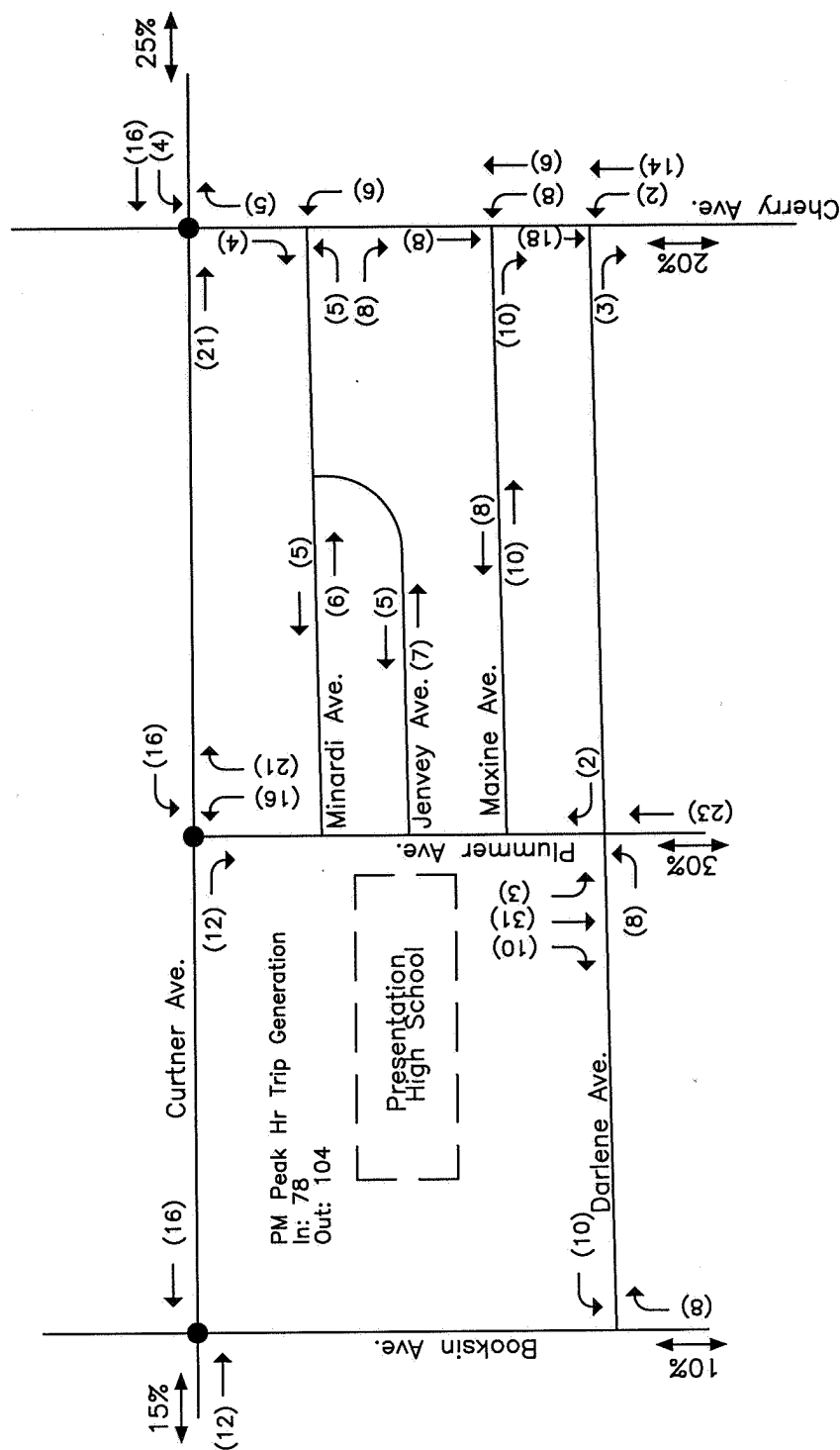
Discussion:

Trip Generation, Distribution, and Assignment

The project trip generation is estimated based on the existing and expected future sports schedule for the new facilities proposed as part of the project, as shown in Table 8, below. It was assumed that 75% of the students in the sports program will need to be picked up after practices or games. Outbound PM peak hour project trips are shown for two scenarios; regular practice and matches. Regular practices typically occur after school and end at 5:00 or 6:00 p.m. Practices ending at 6:00 p.m. will not affect the PM peak hour. The number of students participating in each sport varies from 30 to 100. The addition of summer swim lessons would not affect AM or PM peak hour traffic.

TABLE 8: TRIP GENERATION					
Month	<u>In</u>		<u>Out</u>		No. of Matches per Month
	Practice	Match	Practice	Match	
September 2005	41	31	54	0	7
October 2005	35	37	46	0	8
November 2005	0	17	0	134	3
December 2005	0	17	0	134	3
January 2006	0	17	0	134	13
February 2006	78	17	104	134	5
March 2006	78	0	104	0	10
April 2006	78	0	104	0	6
May 2006	78	0	104	0	5
June 2006	0	0	0	0	0

As shown in Table 8, February will be the busiest month because soccer, softball, and swimming will be practicing simultaneously (the first week of the month will be the last week of the soccer season). Matches, games, or meets typically occur twice per month on weekdays and occasionally on Saturdays. These will have visiting teams and spectators. The greatest impact will occur when a match ends around 5:00 p.m. All other sports activities will not affect the PM peak hour. Off-site traffic impacts were calculated for the highest volume scenario in which a soccer match ends at 4:30 p.m. There would be 17 trips inbounds as parents pick up their students and 134 trips outbound as students, coaches, and spectators leave the match. On days when there are no matches, which are most days, the PM peak hour traffic impacts would be less. The estimated project trips were assigned to the local roadway based on the trip distribution pattern shown on Figure 8.



LEGEND

XX(XX) = AM Peak Hour (PM Peak Hour)

XX% = Denotes % of Existing School Traffic

= Denotes Study Intersection

TRIP DISTRIBUTION

FIGURE 8

Levels of Service

Under project conditions, the three study intersections will operate at LOS B or better during the PM peak hour, as shown in Table 9. Project traffic will have the greatest effect on the intersection of Plummer Avenue/Curtner Avenue. According to the peak hour signal warrant, a traffic signal would not be warranted at this location. Drivers will utilize gaps in traffic created by the two adjacent signalized intersections to make left-turns at this location. Therefore, levels of service will continue to operate at an acceptable level of LOS C or better with the proposed project.

TABLE 9: PROJECT CONDITION LOS			
Intersection	Peak Hour	Average Delay	LOS
Booksin/Curtner	PM	4.3	A
Plummer/Curtner	PM	10.8	B
Cherry/Curtner	PM	9	B

Construction Traffic

The proposed project would require excavation for the proposed swimming pool and soccer/field hockey field and the exporting of this soil from the site. Gravel materials would be imported for use under the synthetic turf proposed for the soccer/softball fields. It is expected that approximately 2,550 cubic yards of soil will be hauled away and 2,500 cubic yards of gravel would be imported to the site. Given a truck can carry approximately 10 cubic yards per trip, there would be 255 truck round trips for exporting soil and 250 round trips for importing gravel. Estimating 15 round trips per day, each task would generate between 17 and 20 days of truck traffic. Construction traffic routes would be determined and approved by the City of San Jose prior to project construction. It is expected that Plummer, Curtner, and Booksin Avenues would be used for construction traffic.

In addition to excavation, workers at the site would now be traveling to and from the site. If possible, some portion of construction would be scheduled during the summer when school is not in session. In any event, parking for construction workers will be entirely within the construction area and not on adjacent city streets. For construction occurring during the school year, workers would arrive before school starts and leave after school ends, minimizing peak hour traffic trip generation. Therefore, the proposed project would not result in significant temporary construction-related traffic.

Other Traffic/Parking Issues

The proposed project would not result in an increase in students attending the high school. Therefore, local transit facilities would not be impacted as a result of the project. Access to and from and within the site would remain similar to the existing condition, with the exception of widening the existing main driveway. Emergency access would be the same as it is currently on the site.

The project would require the relocation of parking spaces on the site, but overall, the total number of parking spaces on the site would not change. A parking survey was conducted after school hours to estimate the number of parking spaces available for sports events. The

school currently has 204 parking spaces. The survey showed 100 to 130 vacant spaces on the site in the afternoon after school is dismissed. Given the sporting events expected to occur and the number of team members and associated spectators, it was determined that the maximum number of spectator cars expected during for a sporting event is 35, which can easily be accommodated in the school parking lot.

For these reasons, the proposed project would not adversely impact transit, emergency access, or parking in the project vicinity or on the site.

3. **Conclusion**

The proposed project would not result in significant traffic impacts. No mitigation measures are required or proposed. **(Less than Significant Impact)**

O. UTILITIES AND SERVICE SYSTEMS

1. Setting

All utilities are currently provided to the project site.

2. Environmental Checklist and Discussion

UTILITIES AND SERVICE SYSTEMS					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 17
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
f) Not be able to be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
g) Be in non-compliance with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
h) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Discussion: The proposed project is the construction of a swimming pool and soccer/field hockey field and the renovation of an existing softball field on an existing high school campus in a highly urbanized area of San Jose. While some existing utilities on the site may require relocation to accommodate the proposed sports facilities, the project would not directly affect the utilities or service systems within the project area. Adequate facilities are available within the project area for the proposed project.

3. Conclusion

The proposed project would not result in significant impacts to utilities and service systems. Therefore, no mitigation measures are required or proposed. **(No Impact)**

P. MANDATORY FINDING OF SIGNIFICANCE

MANDATORY FINDING OF SIGNIFICANCE					
WOULD THE PROJECT:	IMPACT				SOURCE
	YES			NO	
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 4
b) Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2, 4, 5, 6, 7, 14, 15, 16, 17
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 5, 6, 7, 14, 16

Conclusion

As determined in the previous sections of this Initial Study, the project would not result in significant environmental impacts with the implementation of the mitigation measures identified. The project site is not considered to be habitat for any special status wildlife species, nor would it affect cultural resources. The project would not result in cumulative impacts within the project area. Construction-related impacts associated with the grading of the site and the excavation of soils for the construction of the swimming pool would be reduced to a less than significant level with implementation of mitigation measures previously described in Section V., C. of this Initial Study. For these reasons, the proposed project would not result in unavoidable or unmitigatable significant environmental impacts.

CHECKLIST INFORMATION SOURCES

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as a review of the project plans.
2. Bay Area Air Quality Management District, CEQA Guidelines, December, 1999.
3. Santa Clara County Important Farmlands Map, 2000.
4. Holman & Associates, *Archival Literature Search for the Presentation High School Swim and Sports Field Project*, San Jose, Santa Clara County, California, May 2, 2003.
5. Advance Soil Technology, *Soil and Foundation Investigation Proposed Improvements Classroom and Theatre Building, Presentation High School*, July 2000.
6. Cooper-Clark, *Geotechnical Investigation of San Jose*, 1974.
7. Federal Emergency Management Agency, Flood Insurance Rate Map, City of San Jose, Panel No. 060349 0037D, August 2, 1982.
8. California Environmental Quality Act, 2002 CEQA Guidelines.
9. City of San Jose 2020 General Plan.
10. City of San Jose Zoning Ordinance, February 2001.
11. California Department of Conservation, *Geologic Map of the San Francisco-San Jose Quadrangle*, 1990.
12. Keith Meyer, Project Engineer, Rajappan and Meyer, personal and written communication, February through June 2003.
13. USGS, topographical quad, *San Jose, West*.
14. Hexagon Transportation Consultants, Inc., *Traffic Study for Presentation High School, Phase II, Sports Field Improvements*, April 8, 2003.
15. Athletic Recreation Services, *Lighting Plan*, July 28, 2003.
16. Arch.PAC, *Chemical Usage Information at Presentation High School*, July 6, 2003.
17. Rajappan & Meyer Consulting Engineers, *Hydraulic and Stormwater Analysis*, August 8, 2003.

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Moeller, Ken, President, Arch.Pac, personal communication, August 2003.

Rajappan & Meyer Consulting Engineers, *Hydraulic and Stormwater Analysis*, August 8, 2003.

USGS, topographical quad, *San Jose, West*.

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APPENDIX A

CULTURAL RESOURCES REPORT



holman & ASSOCIATES
Archaeological Consultants
"SINCE THE BEGINNING"

3615 FOLSOM ST. SAN FRANCISCO,
CALIFORNIA 94110 415/550-7286

Jodi Starbird
David J. Powers & Associates
1885 The Alameda
San Jose, CA 95126

May 2, 2003

Dear Ms. Starbird:

RE: ARCHAEOLOGICAL LITERATURE SEARCH FOR THE PRESENTATION
HIGHSCHOOL PHASE II SWIM AND SPORTS FIELD PROJECT, SAN JOSE, SANTA
CLARA COUNTY, CALIFORNIA

At your request I have completed an archaeological literature review for the proposed swim and sports field project located at Presentation Highschool. No cultural resources are located either inside or within a quarter mile of the project area.

PROJECT LOCATION

The proposed project is located on the Presentation Highschool campus located between Booksin Avenue and Plummer Avenue just south of their intersection with Curtner Avenue in San Jose. Located on the San Jose South U.S.G.S map of the area, construction will be restricted to an area now containing a softball field and duplexes which will be removed. Additional parking will be reconfigured to the east of the new pool and soccer field.

ARCHIVAL RESEARCH

An archaeological literature review was conducted at the Northwest Information Center (NWIC) located at Sonoma State University by this author (file no. 02-834) to obtain information about recorded prehistoric and/or historic archaeological sites in and around the project area, and any records of previous archaeological field inspections of the project area or its surroundings. There are no archaeological sites of either type recorded inside the project borders or within a quarter mile of it, and the area has not been surveyed previously; the general surrounding area contains reveals a low level of archaeological field research over the past 20 years.

The lack of recorded archaeological site locations in the general vicinity suggests that the Presentation Highschool project area is located in a zone of low to moderate archaeological sensitivity. This report does not make any further recommendation regarding the need to conduct

mechanical subsurface testing and does not recommend archaeological monitoring of site clearing or actual construction of the pool facility and soccer field.

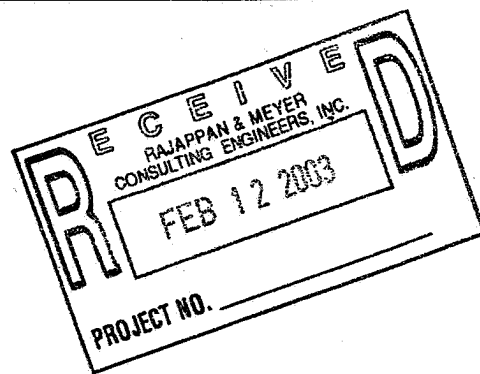
Sincerely,

A handwritten signature in black ink, appearing to read 'Miley Paul Holman', with a stylized flourish at the end.

Miley Paul Holman
Holman & Associates

APPENDIX B

GEOTECHNICAL INVESTIGATION



Soil And Foundation Investigation
Proposed Improvements
CLASSROOM & THEATRE BUILDING
Presentation High School
2281 Plummer Avenue
San Jose, California

for
The Steinberg Group
60 Pierce Avenue
San Jose, California

File No. 00973-S
July 2000



ADVANCE SOIL TECHNOLOGY, INC.

Geotechnical/Environmental Consulting Engineers.

12333 S. Saratoga-Sunnyvale Rd. Suite "E", Saratoga, CA 95070 (408) 446-0809 FAX (408) 446-0349

File No. 00973-S

July 28, 2000

The Steinberg Group
60 Pierce Avenue
San Jose, California 95110

Attention: Mr. David Ewell

Subject: Proposed Improvements
Classroom And Theatre Building
2281 Plummer Avenue
San Jose, California
SOIL AND FOUNDATION INVESTIGATION


Gentlemen:

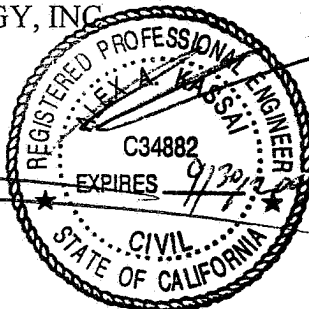
We are pleased to present herein the results of our soil and foundation investigation for the proposed improvements (Classroom And Theatre Building) to be associated with the existing Presentation High School located at 2281 Plummer Avenue in San Jose, California.

The purpose of this investigation was to determine the existing soil conditions underlying the site, their physical properties and provide recommendations for grading and foundation design based on the laboratory analyses of materials encountered at the site. The scope of our work did not include the environmental evaluation of the soil samples or the site. This report summarizes our findings based on the field and laboratory analyses of the materials encountered in the exploratory boring.

We are pleased to be of service to you in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at your convenience.

Very truly yours,
ADVANCE SOIL TECHNOLOGY, INC.


Al Mirza
Project Engineer
Copies: Enclosed (3)





Alex A. Kassai, PE
Principal

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File No. 00973-S

APPENDIX "A"

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Soil And Foundation Investigation
Proposed Improvements
Classroom And Theatre Building
Presentation High School
2281 Plummer Avenue
San Jose, California

INTRODUCTION

The purpose of this soil investigation was to gather sufficient data from the field investigation and to conduct laboratory analysis in order to provide recommendations for the proposed improvements at the above-mentioned site. This report presents and explains the details of this investigation, laboratory testing results, conclusions and recommendations for earthwork operations at the subject site.

Based on the information received, it is our understanding that the proposed improvements will consists of one to two story buildings with a basement and some flat work around them. The location of the site is shown in figure 2 of this report.

SCOPE OF WORK

The scope of our work for the subject site consisted of the following:

1. A field investigation / site reconnaissance, review of available documents and existing site studies in the vicinity of the subject property.
2. A laboratory testing and analysis of the field data to determine the physical and engineering properties of the soil underlying the site.
3. An assessment of the general surface and subsurface soil conditions at the site based on field and laboratory data.
4. A site reconnaissance / evaluation to determine the suitability of the site for the proposed development.

5. Recommendations for the foundation design, including design requirements for the slab-on-grade construction and modulus of subgrade reaction.
6. Recommendations for the active and passive pressures, allowable resistive lateral earth pressure and the coefficient of friction against sliding.
7. An evaluation / recommendations for expected differential settlement of the structures.
8. A general site grading requirements / criteria for excavation, fill placement / spreading of the and the requirement for the import materials at the site.
9. Design requirements for the proposed flexible pavement section.
10. Design requirements for the proposed rigid pavement section.
11. Design requirements for the pavement section seepage control.
12. Recommendations for drainage requirements around the foundation and erosion control.
13. The scope of our work did not include the soil sampling / environmental evaluation of the subject property.

SITE DESCRIPTION

The subject property is located on the west side of Plummer Avenue in San Jose, California (Refer to Figures 1 and 2 for site location). The subject property is located in a residential part of the City of San Jose in Santa Clara County California. It is bound on the north and south by existing single story buildings and driveway / drive thru area respectively. It is bound on the east and west by existing single story buildings and gymnasium / locker rooms respectively.

At the time of this investigation, the site was covered by landscape / grass, bushes and trees. It was vacant at the time of this investigation and was not being utilized for any special purposes.

The general description referred to in this report is based on our site reconnaissance and the information furnished to us by the architect The Steinberg Group. Figure 2 is the site plan showing the location of the site.

FIELD INVESTIGATION

Our subsurface soil investigation was performed on July 19, 2000. The field investigation included the drilling of an exploratory boring, which was drilled to a depth of 40 feet below the existing ground surface.

A truck mounted drill-rig along with an (8) inch diameter continuous flight auger / hollow stem auger was utilized for drilling the borings at the subject site. Undisturbed soil samples were extracted as the borings progressed, by hammering a 2.0 inch I.D split spoon sampler into the ground. A 140 pound hammer with the free fall of 30 inches was utilized to drive the sampler into the ground. Undisturbed soil samples were retained within brass liners inside the split spoon sampler.

Soils encountered in the borings were continuously logged in the field during the drilling operation. Blow counts for the last one foot of driving were recorded in the field during the drilling operation.

Figure (4) to (5) in Appendix "A" shows the boring log for the subject site.

LABORATORY TESTING

Laboratory testing program performed on the soil samples collected from the site was directed towards a quantitative determination of the physical and engineering properties of the soils underlying the site. In order to determine the consistency of the soil and moisture variation throughout the explored profile, all relatively undisturbed soil samples were tested for moisture content and dry density.

To evaluate the strength characteristics of the soil for the foundation engineering design, unconfined compression and direct shear tests were performed on relatively undisturbed soil samples obtained at various depths. The samples for direct shear tests were exposed to water for 24 hours, prior to shearing and sheared in an undrained state at loads of 1,2,3, and 4 kips.

An Atterberg Limits test was performed on the near-surface soil sample to determine the expansion potential of the soil at the site.

The results of laboratory testing are presented in **TABLE I** and in **FIGURE (6)** of Appendix "A".

SOIL CONDITIONS

The exploratory boring (B-1) drilled at the site revealed predominantly a dark brown silty clay with rootlets and extended to a depth of approximately 3.5 to 4.0 feet (mostly fill material) below the existing ground surface. The soil was moist and stiff. The top two feet of the material was moist / saturated with rootlets due to the existing landscape. At this depth a medium brown silty sandy gravel (1/2" to 1/4") was encountered extended to a depth of approximately 12.5 to 13.0 feet below the existing ground surface. The soil was moist and stiff. At the above depth a medium brown silty clay with grayish mottling was encountered and extended to a depth of approximately 17.5 to 18.0 feet below the existing ground surface. The soil was moist and stiff. At this depth, a sandy lens was encountered and extended to a depth of approximately 21.5 to 22.0 feet below the existing ground surface. A dark to reddish brown silty sandy clay with gravel was encountered and extended to a depth of approximately 27.5 feet below the existing grade. It was moist and stiff. At this depth a brown gravelly sand with rock fragments was encountered and extended to the bottom of the boring. It was moist and stiff. The above mentioned boring was then terminated at a depth of 40 feet below the existing ground surface.

Free ground water was not encountered below the existing ground surface in the borings drilled at the site. However, it shall be noted that fluctuations in groundwater level may occur due to variations in rainfall and other factors not in evidence at the time of this investigation.

Figure (4) to (5) in Appendix "A" shows the boring logs for the subject site and the soil profile of the material encountered at different depths.

LIQUEFACTION

Liquefaction is the transformation of clean, loose, sand and silt (cohesionless soil) from a solid state to a semi-liquid state. This transformation occurs under vibratory conditions such as those generated by a seismic event. The soils tendency to compact is accompanied by an increase in the water pressure in the soil, which results in the movement of the water from voids. The resulting upward flow of water will often turn cohesionless soil into a liquefied condition (loss of density).

At the ground surface, liquefaction is manifested by the formation of sand boils, ground cracking, lateral spreading and in some cases development of quick-sand like conditions, which results in the settlement or movement of the structures. To evaluate the liquefaction potential at the site, blow counts were taken at various depths to identify the characteristics of the sub-surface soil underlying

the site. The soil encountered in our exploratory borings did not reveal clean, loose, saturated, uniformly graded, fine grained sands. The blow counts taken indicate firm to stiff soils at the site to the depth of our borings. Therefore based on the information obtained from our exploratory borings, it is our professional opinion that the possibility of liquefaction at the site is perceived to be low.

SEISMIC HAZARD ASSESSMENT

Geologically, the site lies within the San Francisco Bay area, which itself lies within the Coast Range geomorphic province. The San Francisco Bay area is characterized by a series of nearly parallel mountain ranges that trend in a northwest direction. The nearest known active faults to the site are the Calaveras, Hayward and the San Andreas Faults. The Calaveras and Hayward faults are located approximately (12.3) and (8.5) miles to the north-east of the subject property.

The San Andreas fault is located approximately (6.2) miles to the south-west of the subject property. The faults mentioned above have the greatest potential for producing strong shaking at the site.

Review of U.S. Geological Survey Maps of the San Francisco Bay Region indicated that the site is located outside of any special study zones defined by the Alquist-Priolo Geologic Hazards Act of 1972.

Since no major faults have been mapped in the immediate vicinity of the site, the likelihood of ground rupture from faulting across the site is low. However, structures at the subject property will probably experience moderate to strong shaking during the life of the buildings.

Based on the results of the test borings performed at the site, it is our professional opinion that the native soils underlying the site consists of firm to stiff sandy, silty clay with fine to medium gravel with clay binder that extended to the depth of the exploratory borings.

Henceforth, we classify the site as follows:

Soil profile	SD Table 16-J of the 1997 Uniform Building Code
Seismic Source Type	A
Seismic Zone Factor	Z = 4 (Seismic Zone 4)
Seismic Coefficient	N _a = 1.152
Seismic Coefficient	N _v = 1.504

CONCLUSIONS & RECOMMENDATIONS

1. From a soil engineering standpoint, the site covered under this investigation is suitable for the proposed development, provided that the recommendations established in this report are incorporated in the design and construction of the project.
2. Ground water was not encountered at the site. It shall be noted that the ground water will fluctuate at the site based on geological conditions, variation in rainfall and other seasonal changes.
3. The near-surface soil at the site has been found to have a moderate to high expansion potential, when subjected to fluctuations in moisture content.
4. During the drilling operation, low density material and high moisture content was encountered at the location of the boring. Soft, pumping and unstable areas **shall be anticipated** during the grading operation. Supplemental recommendations to stabilize these areas will be given during the grading phase of the project. Please refer to the recommendations outlined in the "**LIME TREATMENT**" section of this report.
5. The fill material encountered at the location of boring during the drilling operation extended to a depth of approximately 2.5 to 3.0 feet below the existing grade. **The fill material shall be sub-excavated to the natural ground, as per the recommendations of the field engineer.** The bottom shall then be scarified to a depth of 12 inches, moisture conditioned and compacted to a minimum of 95% relative compaction. The excavated material shall be placed in lifts and shall be compacted per the recommendations established in the grading section of this report.
6. All grading activities at the site shall be conducted in accordance with the requirements outlined in the "**GRADING SECTION**" of this report.
7. Recommendations for concrete slab construction has been outlined in the "**SLAB-ON-GRADE**" / "**SPECIAL CONSTRUCTION REQUIREMENTS**" section of this report.
8. The proposed buildings may be supported on continuous perimeter and interior isolated spread footings or on a structural rigid mat type of foundation. Recommendations for these types of foundation are outlined in the "**FOUNDATION**" section of this report.

9. All the underground utility trenches on-site shall be placed / located in compliance with the 2:1 slope criteria with respect to the proposed building foundation and shall be backfilled / compacted, per the recommendation established in the **"UTILITY TRENCHES"** section of this report.
10. Drainage shall be provided in accordance with the recommendations established in the **"SURFACE and SUBSURFACE DRAINAGE SECTION"** of this report. The drainage facilities proposed at the site shall be inspected by our representative for compliance to the recommendations outlined in **APPENDIX "C"** of this report.
11. Our office shall review all grading and foundation plans prior to construction so that supplemental recommendations can be made, if necessary.
12. After demolition and removal of the existing asphalt pavement, underground utility lines, roots and stumps, the area of the proposed development shall be reworked and compacted, per the requirements of the project soils report and the field engineer, prior to placement of any additional fill at the site.
13. **The Field Engineer shall be present on-site during the process of demolition.** Our office shall be notified 48 hours in advance, prior to commencement of the operation.
14. Grading contractor shall visit the site, prior to bidding the project. The contractor shall include all the necessary grading activities to be incorporated into the project development.
15. The general contractor / grading contractor / sub-contractors shall comply with the recommendations of the soil engineer at all times. Appropriate field adjustments will be made as deemed necessary / required during the construction phase of the project.
16. If any unforeseen circumstances are encountered during the grading operation, the engineer shall be contacted immediately for additional recommendations, if necessary. The purpose of this precaution is to minimize the chances of the grading work not being approved by the engineer.
17. The subject soil investigation was performed for a typical one to two story buildings with their associated drive thru / parking areas. If there are any changes in the nature or design or different type of structures are proposed for the site, deep borings may be required to provide additional information and recommendations.

18. Our office shall be notified a minimum of 48 hours in advance, prior to any inspection at the site.

The above mentioned conclusions and recommendations are based on the existing soil conditions, physical properties, laboratory analyses and the materials encountered in our exploratory borings.

PLAN REVIEW AND CONSTRUCTION OBSERVATION

All conclusions and recommendations presented in this report are contingent upon Advance Soil Technology, Inc. being retained to **review the building location, foundation plans and any grading plans, prior to construction.** In addition, we shall observe and test any grading (earthwork) operations and observe all foundation excavation at the site. **City of San Jose** now mandates inspection and review letters to document the construction process. It is the responsibility of the owner or his representative to schedule the inspections for the purpose of documentation.

RECOMMENDATIONS

GRADING

The placement of fill and control of any grading operation at the site shall be done in accordance with the recommendations of this report. These recommendations set-forth the minimum standards to satisfy other requirements of this report.

All existing surface and sub-surface structures that will not be incorporated in the final development shall be removed, prior to any grading operations. These objects shall be accurately located on the grading plan to assist the Field Engineer in establishing proper control over their removal. This is to include, but not limited to any existing concrete foundations, utility lines, underground pipes, paved areas and any other improvements. A representative from our firm shall be present during the removal operation.

After clearing operation, the portions of the site that contains surface vegetation or organic top soil shall be stripped to a depth of (4) four inches below the existing ground surface, prior to any other grading operation. This stripping material shall be hauled away from the site or stockpiled to be used for landscape purposes. The holes left by the removal of subsurface structures shall be cleaned of all debris, backfilled with clean on site soil, and compacted to not less than 95% relative compaction, using ASTM D1557 test procedure. This backfill must be structural fill and the operation must be conducted under the supervision of the Soil Engineer. After clearing and stripping operations, the entire site shall be scarified by machine to a depth of 12 inches, moisture conditioned, and compacted to 95% relative compaction according to test procedure ASTM D1557. The fill material encountered at the location of boring during the drilling operation extended to a depth of approximately 2.5 to 3.0 feet below the existing grade. **The fill material shall be sub-excavated to the natural ground, as per the recommendations of the field engineer.** The bottom shall then be scarified to a depth of 12 inches, moisture conditioned and compacted to a minimum of 95% relative compaction, prior to placement of any fill material.

The subgrade preparation for the building pads shall extend a minimum of five (5) feet beyond the building foot print / envelope and shall also be compacted to not less than 95% relative compaction, using the aforementioned procedure.

The fill material shall be spread and compacted in lifts not exceeding (8) inches (uncompacted thickness) and compacted to not less than 95% relative compaction using the ASTM D1557 test procedure. The fill shall be moisture conditioned to slightly above optimum moisture content, prior to compaction.

No rocks larger than four (4) inches in diameter shall be used during the grading operation / in the construction of the building pad. All imported fill shall be predominately granular with a plasticity index no greater than 12 and "R" value greater than 25. All imported soil shall be approved by the Soil Engineer, prior to hauling it to the site.

The Soil Engineer shall be notified at least two days, prior to commencement of any grading operations so that he may coordinate the work in the field with the contractor. All grading work shall be observed and approved by the Soil Engineer. The Soil Engineer shall prepare a final report upon completion of the grading operations.

The grading plan shall be reviewed by Advance Soil Technology, Inc. to ensure conformance / compliance with the requirements of this report.

LIME TREATMENT

Due to the presence of high moisture content and the expansive nature of the soil at the site, the subgrade in the proposed pad area could be lime / cement treated to lower the moisture content. The lime / cement treatment shall penetrate the subgrade / the bottom of the excavation to a minimum depth of 18 inches, below the exposed ground surface.

Lime / cement treatment shall be conducted with appropriate equipment, such that a uniform mix (5% by weight) is obtained over the entire area. Our office shall be notified a minimum of 48 hours in advance, prior to commencement of the lime treatment process. The lime treatment contractor shall discuss the process with the Soil Engineer for recommendations and the usage of type equipment.

FOUNDATIONS

The proposed structures may be supported on a continuous perimeter and interior isolated spread footings or on a structural rigid mat type of foundation. Recommendation for these types of foundations are discussed in the following paragraphs.

1. CONTINUOUS PERIMETER AND ISOLATED INTERIOR SPREAD FOOTINGS

The base of the subject foundations shall be supported on compacted soil. Continuous

perimeter and isolated interior spread footings shall be founded at a **minimum depth of 18 and 24 inches below the lowest adjacent rough soil pad grade for a one and two story structures respectively.** At the above depth, the footings can be designed for an allowable bearing pressure of 2500 p.s.f. for dead plus live loads.

The foundation (continuous perimeter and isolated interior spread footings) shall be properly reinforced, as designed by the Structural Engineer.

The foundation trenches shall be inspected by the Project Soil Engineer for depth verification, after the excavation and prior to the placement of steel to make changes as deemed necessary.

The trenches shall be moisture conditioned to a minimum of 2 to 3% over the optimum moisture content, prior to pouring concrete.

2. STRUCTURAL RIGID MAT FOUNDATION

The proposed structures could also be supported on a structural rigid mat foundation. The mat foundation shall be a minimum of (18) inches thick and shall be designed for an allowable surface bearing value of 1000 pounds per square foot and for a modulus of subgrade reaction of 100 pounds per square inch per inch.

The structural rigid mat foundation shall be supported on a minimum (2) inches of 3/8 inch pea gravel and a minimum of 10 mil visquine shall be utilized for a capillary break / vapor barrier to avoid any subgrade distress due to moisture intrusion into the slab area, (6) inches of Class II base rock compacted to a minimum of 95% relative compaction or (6) inches of 3/4 inch clean crushed rock (no recycled rock shall be used in the building pad) and (12) inches of non-expansive import material (For additional information, please refer to slab-on-grade construction and subsurface drainage in the following sections).

The above bearing values are for dead plus live loads, and may be increased by one-third for short term seismic and wind loads. The design of the structures and foundations shall meet local building code requirements for seismic effects.

The final design of the foundations and reinforcing required shall be determined by the project Structural Engineer. It is suggested that the foundation design be reviewed by Advance Soil Technology, Inc., prior to final approval / construction.

CONCRETE SLAB ON GRADE CONSTRUCTION

All slab-on-grade shall be a minimum of five (5) inches thick, reinforced with a minimum of #4 rebar, 18 inches on center both ways for shrinkage control to minimize the impact of expansion. They shall be supported on four (4) inches of Class II aggregate base (**no recycled rock shall be used on the building pads**), compacted to a minimum of 95% relative compaction and (2) inches of sand along with a minimum of 10 mil vapor membrane in between for capillary break and on (12) inches of non-expansive import material compacted to a minimum of 95% relative compaction.

The slab reinforcing mentioned above could exceed the minimum requirement depending on the anticipated usage and loading conditions. The final reinforcing shall be determined by the project structural engineer. Proper expansion and contraction joints shall be provided in the slab every 20 feet, to minimize the cracks in the slabs.

SIDEWALKS / WALKWAYS

All sidewalks and walkways shall be supported on a compacted subgrade, 12 inches of non-expansive material and four inches of aggregate base (class II base rock). The subgrade and base rock shall be compacted to a minimum of 90 and 95% relative compaction respectively.

BELOW GRADE BASEMENT

RETAINING WALLS

The walls of the proposed basement shall be properly shored, prior to any construction activity. This excavation may need temporary shoring. A competent contractor shall be consulted for recommendations and design of the shoring scheme for the excavation. The recommended design type of shoring shall be approved by the Project Soil / Structural Engineer, prior to usage.

It should be noted that all appropriate guidelines of OSHA shall be incorporated into the shoring design by the contractor. Where space permits, temporary construction slopes may be utilized in lieu of the shoring. Maximum allowable vertical cut for the subject project will be (5) feet and beyond that horizontal benches of 5 feet wide will be required. Temporary slopes shall not

exceed 1 to 1 (horizontal to vertical). In some areas due high moisture content / water table, flatter slopes will be required which will be recommended by the soil engineer in the field.

Foundations for any retaining structures shall conform to the requirements outlined in the "FOUNDATION" section of this report. Furthermore, we recommend that the retaining walls be designed for a lateral earth pressure of 65 pounds equivalent fluid pressure, plus surcharge loads. If the retaining structures are restrained from free movements at both ends, they shall be designed for an allowable active pressure of 75 pounds equivalent fluid pressure. The Structural Engineer shall discuss the surcharge loads with the Soil Engineer. The retaining walls shall be designed for an allowable resistive lateral earth pressure (passive) of 280 pounds equivalent fluid pressure. The top foot of native soil shall be neglected for computation of passive resistance. A coefficient of friction of 0.3 may be used for retaining wall design.

The above values assume a drained condition, and a moisture content compatible with those encountered during our investigation. To promote proper drainage, a layer of at least one foot of gravel or drain rock shall be placed between the facility and the retained material. Either weep holes or perforated pipes (perforations down) shall be included in the design to conduct excess water from behind the retaining structure. Suitable outfall locations for drainage facilities shall be chosen to minimize future erosion. We recommend a thorough review by this office of all designs pertaining to facilities retaining a soil mass.

SPECIAL CONSTRUCTION REQUIREMENTS

The final exterior grade adjacent to the proposed structures shall be such that the surface drainage will flow away from the structures. Rain water discharge at down spouts must be directed on to pavement sections or other acceptable facilities which will prevent erosion in the soil adjacent to the foundations. Surface water should not be permitted to pond or flow adjacent to the building foundation. One way to alleviate this condition is to grade the ground surface adjacent to the proposed structure such that water flows away from the foundation and the slabs. In addition, roof down spouts and surface interceptor drains shall be provided to carry off all excess waters to a proper discharge facility. It is very important that drainage systems be properly maintained by all future occupants.

In landscaped areas, to minimize moisture changes in the natural soils and fills, we recommend the usage of drought resistant plants and / or a drip irrigation watering system. In addition, the plants for landscaping, including trees shall be planted at a minimum distance of one-half the anticipated mature height of the tree from slabs or pavements.

Utility lines that cross under or through perimeter footings, must be completely sealed to prevent moisture intrusion into the areas under the slab and/or footing. The utility trench back-fill shall be of impervious material for at least four (4) feet on both sides of the exterior footings.

ON SITE UTILITY TRENCHING

All the underground utility trenches on-site must be compacted to a minimum of 90% or higher relative compaction per requirements of the local agency / project Soils Engineer and in accordance with the test procedure ASTM D1557-latest edition.

The trenches shall be backfilled as follows:

BUILDING PADS

- The utility trenches in the building pad **shall not be placed closer to the foundation** (continuous and isolated interior footings), **than the required 2:1 slope criteria**. This means that no trenches should be located within an area which would intercept the hypothetical slope line drawn from the bottom edge of the footing at a 2:1 (horizontal to vertical) slope.
- The trenches in the building pad could be backfilled with native material, sand, pea gravel base rock, quarry fines and cement slurry all the way up to the required subgrade elevation. The material shall be placed in (6) to (8) inch uncompacted lifts and each lift shall be compacted to a minimum of 90% relative compaction. Then the required section of the base rock shall be placed and compacted to a 95% relative compaction.
- The utility trenches crossing the building foundation shall be backfilled with concrete / cement slurry at a 2:1 slope criteria from the bottom edge of the footing on either side or with native material, a minimum of four (4) feet on either side of the footing.

PARKING AREAS / DRIVEWAYS / PAVED AREAS

The underground utility trenches in the parking lot shall be backfilled with native material, base rock, sand, quarry fines and cement slurry all the way up to the required subgrade elevation. The

material shall be placed in 12 inch uncompacted lifts and each lift shall be compacted to minimum of 90% relative compaction. The top foot of the trench shall be backfilled with native material and shall be compacted to a minimum of 95% relative compaction. The trenches shall not be backfilled with pea gravel or crushed rock, except as a part of bedding material.

No jetting will be allowed / permitted at any time during the backfill of the material. When trenches are deeper than five (5) feet, shoring is required and shall be installed in accordance with O.S.H.A. regulations.

PAVEMENT SECTION (SEEPAGE CONTROL)

Concrete slabs around the landscaping areas should be protected from water seepage. The water seepage from these areas usually creates over-saturation of the base rock and the subgrade, thereby causing unstable conditions. Henceforth, we recommend the following:

1. Provide vertical cut-off or a deep vertical curb section all along the landscaping areas. The vertical cut-off should extend through the base rock and a minimum of four inches into the subgrade. This will limit the water seepage into the adjacent concrete slabs and pavement sections.
2. Another alternate recommendation would be to provide sub-drains behind the curb on the landscaping side. Sub-drains shall consists of a four inch perforated pipe. The pipe shall be placed in one foot wide trench, minimum 18" deep filled with clean washed pea-gravel, enclosed in a filter membrane. The pipe shall be placed with the perforations down and shall be discharged on to a proper down-spout location. The trench shall then be capped with six inches of native material.
3. All the utility trenches in the concrete slabs shall be capped with at least one foot of native material or concrete or cement slurry.
4. No utility trenches (irrigation lines, electrical conduits, plumbing, etc.) shall be placed close to the foundations along the side of the buildings. This means that no trenches should be located within an area which would intercept the hypothetical slope line drawn from the bottom edge of the footing at a 2:1 (horizontal to vertical) slope. If the trenches are excavated close to the foundation, then a 2:1 (horizontal to vertical) slope criteria shall be achieved at all times. If the above mentioned criteria is not honored or utilized,

then the trenches become a path way for water intrusion into the footing and slab areas, resulting in soil distress and settlement problems.

5. We recommend that the utility lines close to the foundations and along the side of the buildings be inspected to make sure they are installed correctly and compacted properly.

DRAINAGE

SUBSURFACE DRAINAGE

In order to minimize the impact of ground water from the landscape areas on the proposed improvements at the site, we recommend that an extensive sub-surface drainage system be designed and installed around the proposed basement and the landscape areas. All subsurface drainage system shall be designed in such a way as to draw water down to an elevation sufficiently below the underlying subgrade.

DRAINAGE AROUND THE LANDSCAPE AREAS

The drains around the landscape areas shall consists of schedule 40 PVC pipe with ¼ inch perforations, placed facing down behind the heel of the wall and sloped a minimum of 2% to drain. The pipe shall be placed on a minimum of (3) inches of ½" to ¾" clean angular gravel at the bottom and a minimum of (2) feet on the top of the pipe. The drains shall be encased in a filter fabric such as Mirafi 700x or similar. Clean outs shall be provided at all major bends.

SURFACE DRAINAGE

Positive surface drainage (minimum 2%) shall be provided at all times adjacent to the building to direct water away from the foundations and slabs to suitable discharge facility, during and after the construction phase of the project. Additional recommendation for drainage has been established in **APPENDIX "C"** (Drainage and Maintenance).

WATER WELLS

All water wells (if any) shall be capped per the established guidelines of Santa Clara Valley

Water District. The final elevation of the top of the well casing shall be a minimum of 36 inches below any adjacent final soil pad grade prior to any grading or fill placement. No foundation or structure shall be placed over the capped well.

PAVEMENT DESIGN

RIGID PAVEMENT

Rigid pavement (concrete pavement section) for loading docks / driveways / drive through areas / trash enclosure areas, where movement of heavy traffic is anticipated shall be supported on a subgrade and base rock compacted to a minimum of 95% relative compaction. The rigid pavement section shall consists of a minimum of (6) inches of concrete over (6) inches of class II base rock. To minimize movements and cracks in the slabs, we recommend that the rigid pavement be reinforced with a minimum of #3 rebar spaced 18 inches on center both ways.

To minimize the possibility of migration of surface and landscape water into the baserock, which could lead to pavement distress due to softening / unstable subgrade, Hence forth we recommend that curb and gutters with vertical cut-off should be constructed directly on soil subgrade compacted to a 95% relative compaction, rather than on the baserock / aggregate base.

FLEXIBLE PAVEMENT

Bulk samples of the near surface soil were collected for laboratory analysis to determine the "R" (resistance) value of the material for the pavement design.

The following pavement section designs are based on the laboratory resistance "R" value tests of the near surface soil samples and for the assumed traffic indices of 4.5, 5.5 and 6.5 for parking areas, automobile drive thru areas and heavy truck traffic areas.

Alternate pavement section design, which satisfy the State of California Standard Design Criteria and the assumed traffic indices are presented in Table I of this report.

TABLE I

PROPOSED ALTERNATE PAVEMENT SECTIONS

Locations:	<u>PARKING AREAS</u>		
Design "R" Value	5.0		
Traffic Index	4.5		
Gravel Equivalent	16.5		
Recommended alternate pavement section:	<u>1A</u>	<u>1B</u>	<u>1C</u>
Asphalt	2.5"	2.5"	3.0"
Class II base rock(R = 78 min.) Compacted to 95%	9.5"	----	9.0"
Class III base rock(R = 70 min.) Compacted to 95%	----	10.5	----
Native Soil Subgrade Compacted to 95%	12"	12"	12"

TABLE I

PROPOSED ALTERNATE PAVEMENT SECTIONS

Locations:	<u>AUTOMOBILE DRIVEWAY AREAS</u>		
Design "R" Value	5.0		
Traffic Index	5.5		
Gravel Equivalent	20.0		
Recommended alternate pavement section:	<u>1A</u>	<u>1B</u>	<u>1C</u>
Asphalt	3.0"	3.0"	4.0"
Class II base rock(R = 78 min.) Compacted to 95%	12.0"	----	10.0"
Class III base rock(R = 70 min.) Compacted to 95%	----	13"	----
Native Soil Subgrade Compacted to 95%	12"	12"	12"

TABLE I

PROPOSED ALTERNATE PAVEMENT SECTIONS

Locations:	<u>TRUCK TRAFFIC AREAS</u>		
Design "R" Value	5.0		
Traffic Index	6.5		
Gravel Equivalent	23.5		
Recommended alternate pavement section:	<u>1A</u>	<u>1B</u>	<u>1C</u>
Asphalt	3.5"	3.5"	4.0"
Class II base rock(R = 78 min.) Compacted to 95%	14.5"	----	13.5"
Class III base rock(R = 70 min.) Compacted to 95%	----	15.5"	----
Native Soil Subgrade Compacted to 95%	12"	12"	12"

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed at the locations of the borings drilled at the site. In the event that any unusual conditions not covered by the special provisions of this report are encountered during any phase of the construction, or if the proposed construction differs from that covered in the report, our office should be notified so that supplemental recommendations can be provided.
2. This report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations of this report be incorporated into the plans by the architects and engineers for the project, and that the necessary steps are taken to assure that the contractors and sub-contractors carry out such recommendations in the construction of the project.
3. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they may be due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. This report should therefore be reviewed in the light of future planned construction and the current applicable codes.
4. The conclusions and recommendations presented in this report are professional opinions derived from current standards of Geotechnical practice and no warranty is intended, expressed or implied.
5. This report is the property of Advance Soil Technology, Inc. and has been prepared for the exclusive use of our client **The Steinberg Group**.
6. All rights reserved.

APPENDIX "A"

VICINITY MAP

SITE PLAN

KEY TO BORING LOGS

BORING LOG

TABLE I

PLASTICITY INDEX

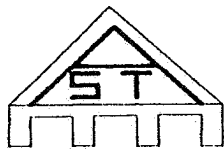


SITE LOCATION MAP

File No: 00973-S

Date: July 2000

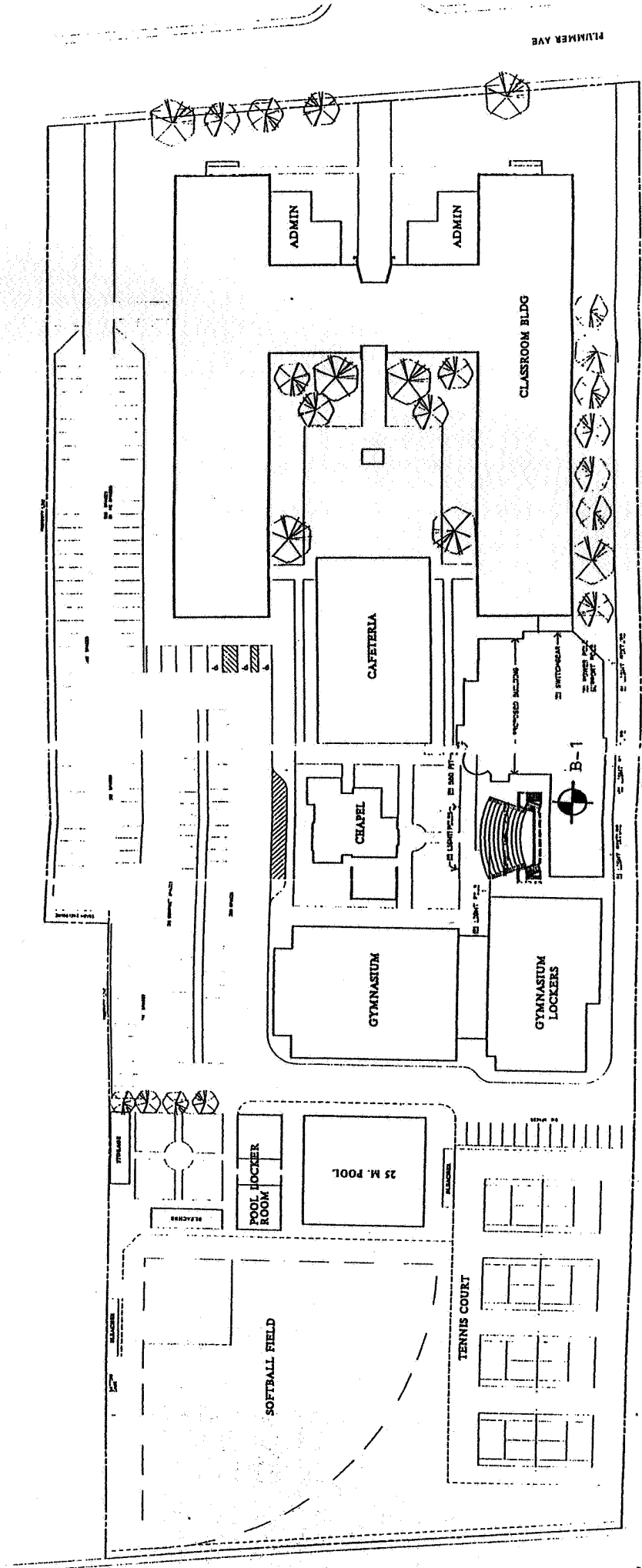
Figure: 1



ADVANCE SOIL TECHNOLOGY, INC.

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PRIMARY DIVISIONS			Group Symbol	SECONDARY DIVISION
COARSE GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN # 200 SIEVE SIZE	GRAVELS MORE THAN 1/2 OF COARSE FRACTION IS LARGER THAN #4 SIEVE SIZE	CLEAN GRAVELS (LESS THAN 5% FINES)	GW	Well graded gravels, gravel-sand mixtures, little or no fines
		GRAVELS WITH FINES	GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
			GM	Silty gravels, gravel-sand -silt mixtures, non-plastic fines
		GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines	
	SANDS MORE THAN 1/2 OF COARSE FRACTION IS SMALLER THAN #4 SIEVE	CLEAN SANDS (LESS THAN 5% FINES)	SW	Well graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures, non-plastic fines
			SC	Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN #200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT IS LESS THAN 50%		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silt with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, silty clays, lean clays
			OL	Organic silts and organic silty clay of low plasticity
	SILTS AND CLAYS LIQUID LIMIT IS GREATER THAN 50%		MH	Inorganic silts, diatomaceous or micaceous fine sandy or silty silt, elastic silts.
			CH	Inorganic clays and silty clays of high plasticity, fat clays
			OH	Organic clays clays and silts of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

DEFINITION OF TERMS

CLEAR SQUARE SIEVE OPENINGS

75um		425um		2mm		4.75mm		3/4"		3"		12"	
SILTS AND CLAYS	SAND						GRAVEL		COBBLES		BOULDERS		
	FINE		MEDIUM		COARSE		FINE COARSE						
#200		#40		#10		#4		AMERICAN STANDARD SIEVE SIZES					

GRAIN SIZES

SANDS AND GRAVELS	BLOWS / FOOT+
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Over 50

RELATIVE DENSITY

SILTS AND CLAYS	STRENGTH=	BLOWS / FOOT+
Very Soft	0 - 1/4	0 - 2
Soft	1/4 - 1/2	2 - 4
Firm	1/2 - 1	4 - 8
Stiff	1 - 2	8 - 16
Very Stiff	2 - 4	16 - 32
Hard	Over 4	Over 32

CONSISTENCY

+Number of blows of 140lb hammer falling 30 inches to drive a 2 inch O.D. (1-3/8" I.D.) split spoon (ASTM D 1586).

=Unconfined compressive strength in tons/sq.ft. as determined by laboratory testing or approximated by pocket penetrometer, torvane, or visual observation.

KEY TO EXPLORATORY LOGS		ADVANCE SOIL TECHNOLOGY, INC. SARATOGA CALIFORNIA
PRESENTATION HIGH SCHOOL		
SAN JOSE CALIFORNIA		
Project: 00973-S	Figure: 3	

Date Drilled : 7/19/00		Logged By : AM		Boring No.		B-1			
SAMPLE DESCRIPTION	Group	Sample	Depth (feet)	Sample No.	Dry Density (p.c.f)	Water Content %	Penetration Resistance (Blows/Foot)	Direct Shear	
								"0" Degree	"C" Cohesion
Vegetation / grass, dark brown silty clay with rootlets, moist and stiff (fill material)	CL		2	1-1	76.3	36.7	12	PPT= 0.75 tsf	
Medium brown silty sandy gravel (1/4" to 1/2"), moist and stiff	GC		5	1-2	99.3	4.6	32		
Sandy gravel 1/2" to 2" with rock fragments,	GC		10	1-3	88.5	19.2	7		
Medium brown silty clay with grayish mottling, moist and stiff	CL		15	1-4	85.1	31.0	15		
Silty sandy lens / coarse, moist and stiff	SC		20	1-5	95.6	20.3	11		
Dark to reddish brown silty sandy clay with gravel, moist and stiff	CL		25	1-6	116.9	7.3	16		
Brown gravelly sand with rock fragments, moist and stiff	GC		30	1-7	116.4	6.2	22		
Same as @ 30 feet, moist and stiff	GC		35	1-8	117.8	7.4	23		
EXPLORATION BORING LOG									
PRESENTATION HIGH SCHOOL					ADVANCE SOIL TECHNOLOGY, INC.				
SAN JOSE CALIFORNIA					SARATOGA CALIFORNIA				
Project No. 00973-S		Figure: 4							

Date Drilled : 7/19/00		Logged By :		AM		Boring No.		B-1(cont.)	
SAMPLE DESCRIPTION	Group	Sample	Depth (feet)	Sample No.	Dry Density (p.c.f)	Water Content %	Penetration Resistance (Blows/Foot)	Direct Shear	
								"0" Degree	"C" Cohesion
Same as above <hr/> Exploratory boring terminated at a depth of 40 feet below the ground surface.	GC		40	1-9	118.5	7.7	42		
EXPLORATION BORING LOG									
PRESENTATION HIGH SCHOOL						ADVANCE SOIL TECHNOLOGY, INC.			
SAN JOSE CALIFORNIA						SARATOGA CALIFORNIA			
Project No. 00973-S		Figure:		5					

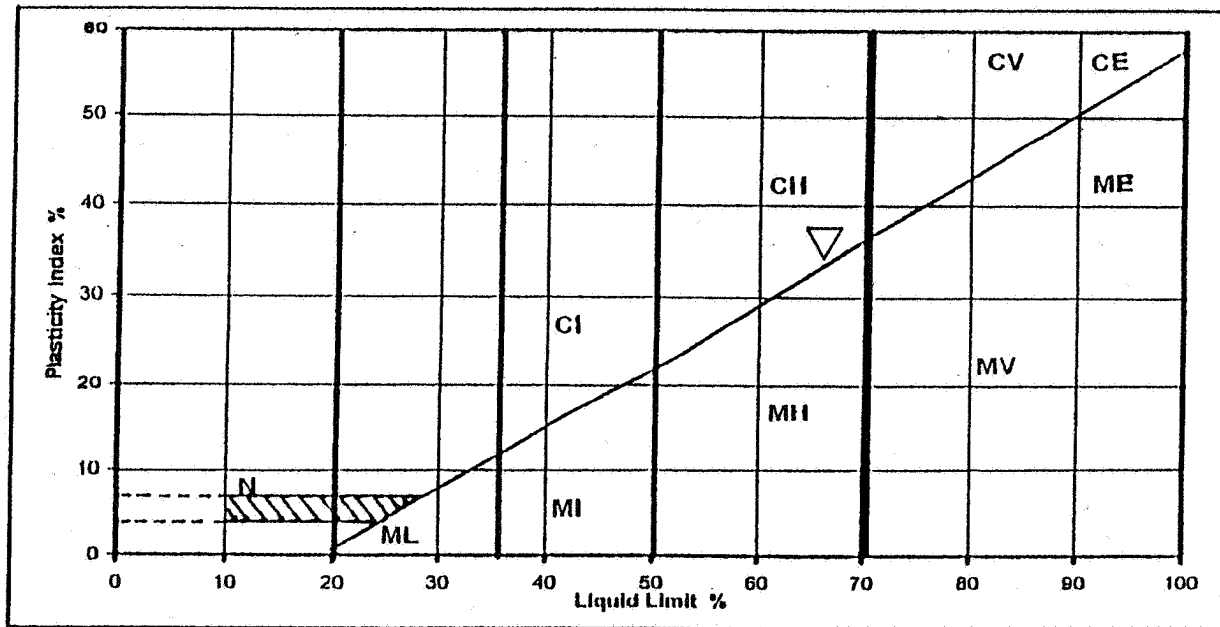
TABLE I**SUMMARY OF MOISTURE, DENSITY,
UNCONFINED COMPRESSION AND DIRECT SHEAR TESTING**

Sample No.	Depth Ft.	<u>In-Place Conditions</u>		Unconfined Compressive Strength k.s.f.	<u>Direct Shear Testing</u>	
		Moisture Content %	Dry Density p.c.f.		Angle of Internal Friction Degrees	Unit Cohesion p.s.f.
1-1	2	36.70	76.30			
1-2	5	4.60	99.30			
1-3	10	19.20	88.50			
1-4	15	31.00	85.10			
1-5	20	20.30	95.60			
1-6	25	7.30	116.90			
1-7	30	6.20	116.40			
1-8	35	7.40	117.80			
1-9	40	7.70	118.50			

PLASTICITY DATA

Key Symbol	Hole No.	Depth Ft.	Liquid Limit %	Plasticity Index %	Unified Soil Classification Symbol*
▽	B-1	0-2	67	35	CH

PLASTICITY CHART



Plasticity Index

File No: 00973-S

Date: July 2000

Figure: 6



ADVANCE SOIL TECHNOLOGY, INC.

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APPENDIX "B"

GRADING SPECIFICATIONS

PROPOSED IMPROVEMENTS
PRESENTATION HIGH SCHOOL
CLASSROOM AND THEATRE BUILDING
2281 PLUMMER AVENUE
SAN JOSE, CALIFORNIA

GRADING SPECIFICATION

GENERAL DESCRIPTION

These specifications have been prepared for the grading operation of the proposed commercial development at the subject property located at 2281 Plummer Avenue in San Jose, California. The Soil Engineer shall be consulted for any site work connected with the site development, to ensure compliance with these specifications. The site preparation, borrow area preparation and fill construction shall be observed and evaluated by the Soil Engineer.

Unobserved and unapproved grading work will not be accepted under any circumstances and shall be removed / replaced under observation.

Grading shall be carried out in conformance with recommendations established in the soils report and the approved set of plans for the site. This is to include all clearing and grubbing of the ground on which a fill is to be placed, preparation, filling, spreading, moisture conditioning, compaction and all subsidiary work necessary to complete the grading of the filled areas to conform with the lines, grades and slopes.

TESTS

The standard test used to define acceptable moisture contents and densities of all compaction work shall be the ASTM D1557 test procedure. All densities shall be expressed as a relative density in terms of maximum density obtained in the laboratory by the foregoing standard procedure. The construction moisture content shall be expressed in terms relative to the optimum moisture content so determined.

CLEARING, GRUBBING, AND PREPARING AREAS TO BE FILLED

All trees, brush and any other debris shall be removed, piled or otherwise disposed of so as to leave the areas free of unsightly debris. All excavation for the removal of trees or other existing surface and subsurface structures shall be cleaned of all loose and deleterious material, backfilled and compacted.

All septic fields (if encountered during grading), and debris must be removed from the site, prior to any grading or fill operations. Septic tanks including all connecting drain fields and other lines must be totally removed and the resulting depressions properly reconstructed and filled, as required to the complete satisfaction of the Soil Engineer.

All water wells shall be capped according to the requirements of the Santa Clara Valley Water District. The final elevation of the top of the well casing shall be a minimum of 36 inches below any adjacent finished grade, prior to any grading or fill operations.

The organically rich top soil shall be stripped to a depth of four (4) inches below the existing ground surface. The stripping material / top soil shall be stockpiled to be used in the landscape areas. After which the areas to receive structural fill shall then be scarified to a depth of 12 inches below the existing surface, until the surface is free from ruts, hummocks or other uneven features which would tend to prevent the uniformity of compaction due to the usage of equipment.

The areas shall be properly moisture conditioned and pre-compacted to a 90% relative compaction, prior to placement of any structural fill material. The fill material shall be bladed until it is uniform and free from large clods and brought to the proper moisture content as per the requirement and then compacted to a 90% relative compaction.

MATERIALS

The materials for structural fill shall be approved by the Soil Engineer before commencement of the grading operations. Any imported material shall be approved for use before being brought to the site. The materials used shall be free of vegetable matter and other deleterious material. Import soils shall have a plasticity index of no greater than 12 and have an "R" value greater than 25.

PLACING, SPREADING AND COMPACTING FILL MATERIAL

The select fill material shall be placed in layers which when compacted shall not exceed eight inches (8) in thickness. Each layer shall be spread evenly and shall be thoroughly blade mixed during the spreading to assure uniformity of material in each layer.

The moisture content of the fill material shall be -2 to +3% of the optimum moisture content. When the soil moisture content is below that specified, water shall be added until the moisture content is as specified to assure thorough bonding during the compaction process. When the moisture content of the fill material is above that specified, the fill material shall be aerated by blading or other satisfactory methods until the moisture content is as specified.

After each layer has been placed, mixed and spread evenly, it shall be thoroughly compacted to not less than 90% relative compaction. Compaction shall be by sheep foot rollers, multiple wheel pneumatic tired rollers or other types of acceptable compaction rollers. Rollers shall be of such design that they will be able to compact the fill to the specified degree of compaction. Rolling shall be accomplished while the fill material is within the specified moisture content range. Rolling of each layer shall be continuous over its entire area and the roller shall make sufficient passes to assure that the required density has been obtained.

The fill operation shall be carried out in (8) inches compacted layers, as specified above, until the fill has been brought to the finished slopes and grades as shown on the accepted plans. All earth moving operations shall be controlled to prevent water from running into excavated areas. All water shall be promptly removed and the site kept dry.

CONSTRUCTION ACCEPTANCE

The soil engineer shall observe the entire grading operations, so that he can provide recommendations as deemed necessary during the construction phase of the project. Unobserved and unapproved grading work will not be accepted under any circumstances. The grading operation shall be performed under the supervision of the soil engineer and in accordance with the requirements of the specifications of this report.

SEASONAL LIMITS

No fill material shall be placed, spread or rolled during unfavorable weather conditions. If the grading operation is interrupted due to heavy rain, fill operations shall not be resumed until field density / moisture test have been taken and indicate that the moisture content of the fill is as previously specified or approved / directed by the soil engineer.

IRRIGATION LINE REMOVAL IF ENCOUNTERED IN THE FIELD DURING GRADING

The methods of removal will be designated by the soil engineer in the field depending upon the depth and location of the line. One of the following methods will be used.

- a. Remove the pipe and fill and compact the soil in the trench as required elsewhere herein.
- b. Cap the ends of the line with concrete to prevent moisture intrusion. The length of the cap shall not be less than five feet. The concrete mix shall have a minimum shrinkage.

UNUSUAL CONDITIONS

In the event that any unusual conditions, not covered by the special provisions, are encountered during grading operations, the soil engineer shall be immediately notified for supplemental recommendations.

APPENDIX "C"

DRAINAGE & MAINTENANCE

RECOMMENDATIONS

DRAINAGE AND MAINTENANCE

Over the years as engineers, we have observed that most of the foundation, slabs, sidewalks, walkways and pavement failures/distress is usually caused by water or aggravated by excessive water. In general water is an instrument of nature and could cause problems, if it is not controlled. The problems mostly associated with it are as follows:

- ⇒ Erosion of soil adjacent to the building foundation.
- ⇒ Expansion of clays.
- ⇒ Slabs heaving due to seepage through the soils and the base rock.
- ⇒ Saturation of the sub-surface soils and base rock, thereby causing unstable conditions.
- ⇒ Settlement of foundations, slabs, walkways, sidewalks and pavements due to excessive moisture seepage and consolidation of the material.

To minimize the above mentioned problems in the future, the following suggestions and recommendations should be utilized to constitute proper maintenance procedures that will enhance the drainage conditions:

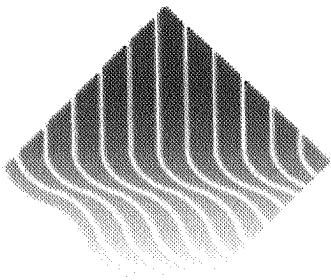
1. Do not place any loose or uncompacted soils close to the building foundation.
2. Do not compact soil or material in the trenches by flooding it with water, commonly called jetting.
3. Water should not be allowed to pond or flow close/adjacent to the building foundation.
4. Erosion areas should be corrected immediately and any flowing water should be directed away from it.
5. Check roof drains, gutters and down spouts to be sure that they are clear. Depending upon their location, roofs can shed large quantities of water during heavy rains. Without proper gutters or other adequate drainage facility, water falling from eaves may collect against the foundation of the building.

6. Water should be drained into lined ditches or closed pipes that discharge into an appropriate facility.
7. Periodically check to verify that subsurface drains are not clogged.
8. Correct any damage to the drainage system as soon as possible. Prompt attention to the minor problems could prevent them from growing into major problems.
9. Remove any obstruction from the surface drains. Make certain that all drain elements are in good repair.
10. Never connect roof drains to subsurface drains.
11. Do not obstruct or modify any part of drainage system without a professional advice.
12. Do not over water or irrigate the landscaping areas. The sprinkler system should not be left on longer than required and never overnight.
13. Above all maintain a positive drainage at all times. All water should have a cleared flow route away from the building.

In general common sense and awareness is all that is needed to prevent any expensive or a serious damage. If any of the above problems exists, our office shall be notified as soon as possible.

APPENDIX C

CHEMICAL USEAGE REPORT



ARCH • PAC

Sunday, July 06, 2003

Mr. Keith Meyer
Rajjapan & Meyer
San Jose, CA

Re: ***Chemical Usage at Presentation H.S. Pool***

Dear Keith,

Pursuant to your request I am writing regarding the use of chemicals at the Presentation H.S. pool. We are proposing the use of primarily two chemicals – the first being "liquid chlorine" and second carbon dioxide.

Sodium Hypochlorite or NaOCl will be in a 12.5 percent solution of liquid when first delivered - It has a short shelf life and will depreciate about 30 percent of its strength monthly if not consumed. The "California Building Code" 2001 edition on Table 3-E states that this chemical is considered a *corrosive* and allows for the storage of "**500 gallons as an exempt amount of a hazardous materials . . .**" – we are proposing the use of a dual containment storage vessel with a 499 gallon capacity in a dedicated and exhausted storage area.

Chlorine is used to sanitize the water and oxidize any foreign material in the pool at the rate of one to four parts per million. The storage room will be monitored for chemical leakage and maintained by a trained commercial pool operator. Chlorine is most commonly used to sanitize drinking water, it will be found in the pool water in about the same levels as drinking water and its odor should not be noticeable any more than it is when tap water is utilized to water landscaping using sprinklers to disperse (or aerate) treated water.

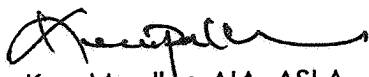
CO2 is also proposed. CO2 will be utilized to regulate the pH of the pool water in order to increase equipment longevity and allow the chlorine the right conditions to enable it to function as a sanitizer. Carbon Dioxide is commonly found in nature and is odorless and colorless. The CO2 will be stored in a 22 inch diameter by 72 inch tall tank with the ability to contain 600 lbs. of CO2 in liquid form or 5,246 CF of gas. CO2 is naturally present in the air we breath. Plants require it in order to grow or photosynthesize. It is most commonly used commercially in restaurants as the source of the carbonation in soda drinks. It is the gas that escapes from "dry ice" another of its forms.

We will have in place, not only monitors to verify that no leaks or spills occur but will provide fully trained personnel to handle each chemical with the correct safety equipment –

2103-D Camino Vida Roble • Carlsbad, CA 92009 • phone: (760) 603-1200 • fax: (760) 603-1259

knowledgeable in commercial pool operation. The Chemical Safety Data Sheets are attached for your review.

Best regards,

A handwritten signature in black ink, appearing to read 'Ken Moeller', with a stylized flourish at the end.

Ken Moeller, AIA, ASLA
President

KM/ad
enc

M A T E R I A L S A F E T Y D A T A S H E E T

Jones Chemicals, Inc.
80 Munson Street
LeRoy, New York 14482
(and Principal Cities)

For information, please contact the Jones Chemicals facility in
your area at () - or the Jones Chemicals Corporate
Laboratory in Caledonia, New York at (716) 538-2311.

In the event of a transportation emergency,
Call CHEMTREC: (800) 424-9300

SECTION I - IDENTIFICATION

TRADE NAME: Sunny Sol 150®
CHEMICAL NAME: Sodium Hypochlorite
FORMULA: NaOCl
DOT SHIPPING NAME: Hypochlorite Solution
DOT HAZARD CLASS: Corrosive Material
UN/NA NUMBER: UN 1791
DOT LABEL: Corrosive
DOT PLACARD: Corrosive
PACKING GROUP: III
REPORTABLE QUANTITY: Sodium Hypochlorite: 100 Pounds/45.4 Kilograms
CAS NUMBER: 7681-52-9

NFPA DESIGNATION: The NFPA has not rated sodium hypochlorite.

SECTION II - HAZARDOUS INGREDIENTS

MATERIAL	% BY WEIGHT	CAS NO.	OSHA PEL	ACGIH TLV
Sodium Hypochlorite	12.5-15.6	7681-52-9	Not Applicable	Not Applicable
Sodium Hydroxide	0.1-2.0	1310-73-2	2mg/m ³ ceiling	STEL/CEIL(c) 2mg/m ³ ceiling
Inert Ingredients	Balance	Not Applicable	Not Applicable	Not Applicable

CARCINOGENICITY STATUS: NTP - No, IARC - No, OSHA - No.

SECTION III - PHYSICAL DATA

APPEARANCE: Yellow-green liquid
BOILING POINT: 219°F (104°C) for 12.5% NaOCl by wt.
FREEZING POINT: - 11°F (- 24°C) for 12.5% NaOCl by wt.
ODOR: Chlorine
PH: 12.5 - 13.5 s.u. @ 25°C
VISCOSITY (Cs): 2.15 @ 23°C for 12.5% NaOCl by wt.
PERCENT VOLATILE BY VOLUME: Variable water plus products of decomposition
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY (Water=1): 1.218 @ 20°C for 13.79 % NaOCl by wt.
VAPOR DENSITY (AIR=1): Not available
VAPOR PRESSURE (mm Hg): Variable water plus products of decomposition.

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (Test method): Not applicable
AUTO IGNITION TEMPERATURE: Not applicable
FLAMMABLE LIMITS IN AIR (Volume %): Not applicable
EXTINGUISHING MEDIA: Flood with water or carbon dioxide (CO2)
SPECIAL FIRE FIGHTING PROCEDURES: Use National Institute of Occupational Safety & Health (NIOSH) approved respirator with acid type canister or use self-contained breathing apparatus.
Unusual fire and explosion hazards: material is a strong oxidizer. Contact with combustibles may initiate or promote combustion. Acid and heat accelerate decomposition.
Decomposition products may include chlorine.

SECTION V - HEALTH HAZARD INFORMATION

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

No medical conditions are known to be aggravated by exposure.

ROUTES OF EXPOSURE

INHALATION: Fumes from spills can cause severe irritation and chemical burns to the nose, throat, and lungs. Very little hazard from properly stored solution.
SKIN CONTACT: Severe irritant, reddening of skin, can cause chemical burns to skin.
SKIN ABSORPTION: Same as skin contact.
EYE CONTACT: Severe irritant, corrosive, can severely burn eyes.
INGESTION: Causes irritation of membranes of the mouth, throat, and stomach pain and possible ulceration. LD50 (oral, rat) for 12.5% NaOCl is approximately 5 g/kg body weight.

(Jones Chemicals, Inc. Sunny Sol® 150)

EFFECTS OF OVEREXPOSURE

ACUTE OVEREXPOSURE (see Routes of Exposure above)

SWALLOWING: See "ingestion" under routes of exposure.

SKIN CONTACT: severe Irritant, reddening of skin, skin damage, chemical burns.

INHALATION: Fumes from spills are very irritating to mucous membranes.

EYE CONTACT: Extreme irritant, corrosive.

CHRONIC OVEREXPOSURE (see Routes of Exposure above)

EYE: Can cause damage.

SKIN: Can cause damage, chemical burns.

EMERGENCY AND FIRST AID PROCEDURES

IF CONTACT WITH EYES OCCURS: flush with water for at least fifteen (15) minutes. Get medical attention.

IF CONTACT WITH SKIN OCCURS: wash with plenty of soap and water.

INHALATION: Remove to fresh air. Call a physician if exposure is severe.

IF SWALLOWED: drink large amounts of water. Do NOT induce vomiting. Call a physician or poison control center immediately.

SECTION VI - REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY

Solutions are fairly stable in concentrations below 10%. Stability decreases with concentration, heat, light, exposure, decrease in pH, and contamination with heavy metals, such as nickel, cobalt, copper, and iron.

INCOMPATIBILITY

Acids, alcohols, amines, ammonia, chlorinated isocyanurates, combustibles, cyanides, detergents, ethers, hydrocarbons, oxidizable materials, reducing agents. Corrosive to most metals.

DECOMPOSITION PRODUCTS

Hypochlorous Acid (HOCl), chlorine, hydrochloric acid. Composition depends upon temperature and decrease in pH. Additional decomposition products, which depend upon pH, temperature and time, are sodium chloride, sodium chlorate and oxygen.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Will not occur.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Cleanup personnel must wear proper protective equipment (See Section VIII). Contain in diked area. Neutralize with sodium bisulfite or ferrous salt solutions. Place neutralized material in DOT specification approved container(s). Flush area with large amounts of water. Comply with all Federal, State and Local reporting requirements.

WASTE DISPOSAL

Contact Federal, State, County, and Local environmental regulators for guidance regarding proper disposal.

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS

Local exhaust is recommended.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY: Use National Institute of Occupational Safety and Health (NIOSH) or Mine Safety and Health Administration (MSHA) approved respirator appropriate for this product when permissible exposure limits are exceeded.

EYES: Use chemical goggles and face shield.

GLOVES: Use chemical resistant rubber, plastic, or neoprene gloves.

OTHER: Use chemical resistant splash apron and boots. Safety shower and eye wash fountain should be located nearby.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING

DANGER: This product is corrosive and may cause severe skin irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin or on clothing. Wear goggles and face shield and chemical resistant gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

PROPER STORAGE AND DISPOSAL REQUIREMENTS

Store this product in a cool, dry area away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water.

Disposal for domestic use: Do not reuse container. Rinse thoroughly before discarding in trash.

Disposal for all other uses: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.

STORE IN AN UPRIGHT POSITION

OTHER PRECAUTIONS

STRONG OXIDIZING AGENT: Mix only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc., or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

ADDITIONAL REGULATORY CONCERNS

EPA: May not be used for disinfection or sanitization without prior approval by EPA. Repackagers must obtain EPA registration and establishment numbers.

FIFRA: This product is regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) if used as a disinfectant or sanitizer.

TSCA: Included in the Toxic Substances Control Act (TSCA) Inventory Of Chemical Substances.

MSDS PREPARED BY: Jones Chemicals, Inc.
80 Munson Street
LeRoy, New York 14423
Corporate Environmental Department 716-768-6281
Corporate Laboratory 716-538-2311

ISSUE DATE: 12/05/94

SUPERSEDES ISSUE DATED: 03/20/90

The information herein is given in good faith but no warranty, expressed or implied is made.

MATERIAL SAFETY DATA SHEET**LIQUID CARBONIC**

SPECIALTY GAS CORPORATION

135 SOUTH LA SALLE STREET • CHICAGO, ILLINOIS 60601-4202
PHONE (312) 855-7500

Gaseous Carbon Dioxide

Revision Sept. 1987

Emergency Phone Numbers: (504) 673-8831; CHEMIREC (800) 424-9300

SECTION I--PRODUCT IDENTIFICATION

CHEMICAL NAME: Carbon Dioxide
COMMON NAME AND SYNONYMS: Gaseous Carbon Dioxide, Carbon Dioxide,
 Carbon Anhydride, Carbonic Acid Gas
CHEMICAL FAMILY: Non-Metallic Oxides **FORMULA:** CO₂

SECTION II--HAZARDOUS INGREDIENTS

MATERIAL	VOLUME %	CAS NO.	1986-7 ACGIH TLV UNITS
Carbon Dioxide	99.5%	124-38-9	TWA 5,000 PPM STEL 15,000 PPM New STEL Proposed 30,000 PPM OSHA PEL - NONE

SECTION III--PHYSICAL DATA

BOILING POINT (°F.) Sublimes -109.3°F
SPECIFIC GRAVITY (H₂O=1) (@ 1 ATM Solid @ -11°F) 1.56
VAPOR PRESSURE @ 68°F 831 psig
VAPOR DENSITY (AIR=1) @ 68°F 1.53
SOLUBILITY IN WATER @ 68°F 87.8% by Volume
APPEARANCE AND ODOR Colorless gas slight pungent odor

% VOLATILE BY VOLUME 100%
EVAPORATION RATE (BUTYL ACETATE=1) N/A

SECTION IV--FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) N/A
EXTINGUISHING MEDIA: Non-flammable gas - carbon dioxide is an extinguishing agent
SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool any fire exposed containers to prevent rupture.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION V--HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: TWA (1985-6 ACGIH) is 5,000 PPM
EFFECTS OF OVEREXPOSURE: At 2 to 3% concentration symptoms of simple asphyxia occur; 3 to 5% causes increased respiration and headache; up to 15% causes headache, nausea, vomiting and unconsciousness. Higher concentrations cause rapid circulatory insufficiency leading to a coma and death. CO₂ is the most powerful cerebral vasodilator known. Persons in ill health where such illness would be aggravated by exposure to Gaseous Carbon Dioxide should not be allowed to work with or handle this product.
EMERGENCY AND FIRST AID PROCEDURES: Quickly remove to fresh air. Get prompt medical attention. Rescue personnel should have self contained breathing apparatus. Administer oxygen or artificial respiration as needed.
ROUTE(S) OF ENTRY: INHALATION? Yes SKIN? No INGESTION? No
CARCINOGENICITY: NTP? No IARC MONOGRAPHS? No OSHA? No

SECTION VI--REACTIVITY DATA

STABILITY: UNSTABLE () STABLE (X) CONDITIONS TO AVOID: N/A

INCOMPATIBILITY (MATERIALS TO AVOID): If moisture is present, it can form carbonic acid.

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: MAY OCCUR () WON'T OCCUR (X)

CONDITIONS TO AVOID: N/A

SECTION VII--SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ventilate area. Carbon dioxide is a heavy gas and will collect in low areas without assisted ventilation. Evacuate all personnel from affected area. Use self-contained breathing apparatus to enter area to stop leak.

WASTE DISPOSAL METHOD: Vent slowly to atmosphere with ventilation in remote area.

SECTION VIII--SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Positive pressure air line with mask or self-contained breathing apparatus.

VENTILATION: LOCAL EXHAUST (X) Provide adequate ventilation to prevent concentration over the allowable TWA or STEL.

MECHANICAL (GENERAL) ()

PROTECTIVE GLOVES: Cotton or leather. EYE PROTECTION: Safety goggles or glasses

OTHER PROTECTIVE EQUIPMENT: Safety shoes
Use low oxygen alarm (less than 18%) where necessary

SECTION IX--SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Use only DOT or ASME coded containers. Protect cylinders from physical damage. Store in well ventilated, cool, and dry areas. Follow normal compressed gas storage recommendations. Do not store cylinders at high temperatures or over 120°F. Store carbon dioxide cylinders with the cap on tight and valve end up. Avoid low storage areas and corrosive chemicals.

OTHER PRECAUTIONS: Compressed gas cylinders should not be refilled except by qualified producers of compressed gases. See Compressed Gas bulletin SB-2, "Oxygen Deficient Atmospheres", CGA pamphlets P-1 "Safe Handling of Compressed Gases in Containers"; G-6, "Carbon Dioxide"; G-6.1, "Standard for Low Pressure CO₂ Systems at Consumer Sites"; G-6.3, "Carbon Dioxide Cylinder Filling and Handling Procedures for Beverage Plants, NSDA TD01."

No guaranty is made as to the accuracy of any data or statement contained herein. While this material is furnished in good faith, NO WARRANTY EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE IS MADE. This material is offered only for your consideration, investigation and verification and Liquid Carbonic shall not in any event be liable for special, incidental or consequential

CARBON DIOXIDE

CARBONIC ACID GAS, DRY ICE

CAUTION!

MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. WARNING—CONTENTS UNDER PRESSURE. GAS REDUCES OXYGEN AVAILABLE FOR BREATHING.

Avoid contact with eyes, skin, and clothing. Avoid breathing gas. Wash thoroughly after handling. Asphyxiant if less than 19.5% oxygen is present.

EFFECTS OF OVEREXPOSURE: Exposure may cause headache, dizziness, and unconsciousness. Can cause rapid suffocation. Skin contact may cause dermatitis or frostbite.

FIRST AID PROCEDURES: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of exposure, call a physician. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes.

Consult MSDS for further health and safety information.

CAS NO. [124-38-9]

APPENDIX D
HYDRAULIC AND STORMWATER
ANALYSIS

Hydraulic and Stormwater Analysis

FOR PRESENTATION HIGH SCHOOL PHASE II AQUATIC FACILITIES AND SPORTS FIELDS IMPROVEMENT PROJECT

AUGUST 8, 2003

prepared by

Rajappan & Meyer Consulting Engineers, Inc.

1038 Leigh Ave, Suite 100, San Jose, CA 95126

PH:(408) 280-2772 FX:(408) 280-6803

www.rmengineers.com

Bo Gao, P.E.

RCE C59985



I INTRODUCTION

The project area is within the City of San Jose and County of Santa Clara on Plummer Avenue at Presentation High School. Two drainage maps showing existing and proposed conditions are included as Appendix A.

The proposed project would add a 30m X 30yard swimming pool, construct additional parking lots to compensate for lost parking space, remove existing tennis courts and two residential dwelling units, and construct combined soccer and softball fields with artificial turf. The project will also add landscape areas that will serve as an infiltration trench and retention pond. The existing surface drainage pattern will be maintained and total peak discharge draining into the City storm drain system will be limited to current flow rates. The modification to existing drainage system either on-site or off-site, are not anticipated.

The purpose of this calculation is to verify the adequacy of existing storm drain system at the school site and determine the retaining capacity of infiltration trench required to maintain existing peak flow discharging to the City storm drain system, using FHWA's HYDRAIN Storm Drain Design and Analysis Program (HYDRA).

II AREA CHARACTERISTICS

The project area is located in City of San Jose at residential neighborhood of Plummer Avenue within the Santa Clara Valley of the San Francisco Bay area. The topography is very flat ranging in elevations from 158 to 160 feet.

The school site is between Plummer Avenue on the east and Booksin Avenue on the west, totaling 8.80 net acres. The site has been developed with buildings, parking lots, landscape and sports fields.

III HYDROLOGY

The mean annual rainfall for the project area is 13 inches, per Santa Clara County Records. The rainfall intensity curve, hydrograph, time of concentration (Tc) are estimated by FHWA's HYDRAIN Storm Drain Design and Analysis Program (HYDRO).

Determination of runoff was by the rational method. The following runoff coefficients are used:

<u>TYPE OF DRAINAGE AREA</u>	<u>RUNOFF COEFFICIENT</u>
AC or PCC Surfacing	0.90
Landscaped Areas	0.40
Building Roof	0.90

The gravity drainage system was analyzed according to City's drainage design guidelines. The proposed drainage system data was computed by FHWA's HYDRAIN Storm Drain Design and Analysis Program (HYDRA) for determining the storm runoff for a 25 year storm event to generate conservative results.

IV DRAINAGE SYSTEM DESCRIPTION AND ANALYSIS

The surface runoff of the southern half of the school site is collected through inlets and a pipe system on the south side of the site, connecting to the City storm drainage system on Plummer Avenue, shown as "Drainage System A" on the drainage maps. In the areas of this drainage system, additional parking area will be constructed on the existing landscape area at southern exit on Plummer Avenue, which would increase the peak flow. However, part of the surface flow from the existing tennis courts will be re-routed to "Drainage System B" due to the construction of artificial turf fields. Therefore, the total peak flow discharge to "Drainage System A" will be reduced from 5.72 cfs to 5.34 cfs. No storm water mitigation measures are necessary.

The surface runoff of the northern half of the school site is collected through inlets and a pipe system on the north side of the site, connecting to the City storm drainage system on Booksin Avenue, shown as "Drainage System B" on the drainage maps. The storm runoff to this system will increase due to the proposed improvements, including construction of artificial turf fields and parking lots on existing landscaped areas, with total peak flow discharge increasing from 10.45 cfs to 12.60 cfs. To maintain peak flow discharge to the City storm drain system to the existing level, 600 cubic feet of on-site surface retaining capacity is required. A 300ft X 10ft landscaped infiltration trench with depth of 0.5 ft is proposed to be constructed along west side of the soccer field to provide 1000 cubic feet retaining capacity. This infiltration fence will be coincidental with the 10 ft. setback buffer from the back of sidewalk to soccer field fence. The infiltration area will be landscaped with shrubs.

V REFERENCES

FIRM Map 060337-0070F, dated December 16, 1988

CALTRANS; Highway Design Manual, fifth edition.

FHWA; Hydraulic Design of Highway Culverts, Hydraulic Design Series No. 5

FHWA; Urban Drainage Design Program, HY-22

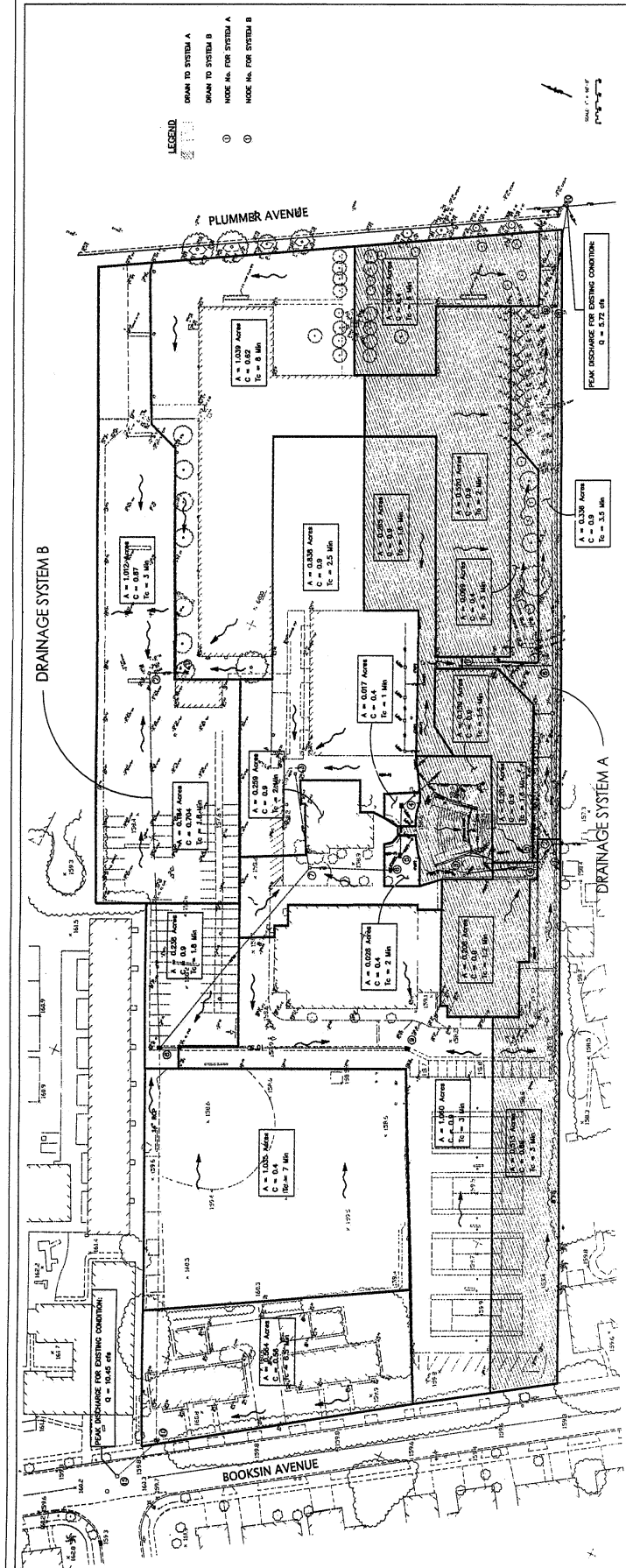
Hydrain, Version 6.0

VI APPENDICES

- a) Drainage Map
- b) Drainage System A, Existing Condition
- c) Drainage System A, Propose Condition
- d) Drainage System B, Existing Condition
- e) Drainage System B, Proposed Condition
- f) Drainage System B, Storage Requirement

Appendix A

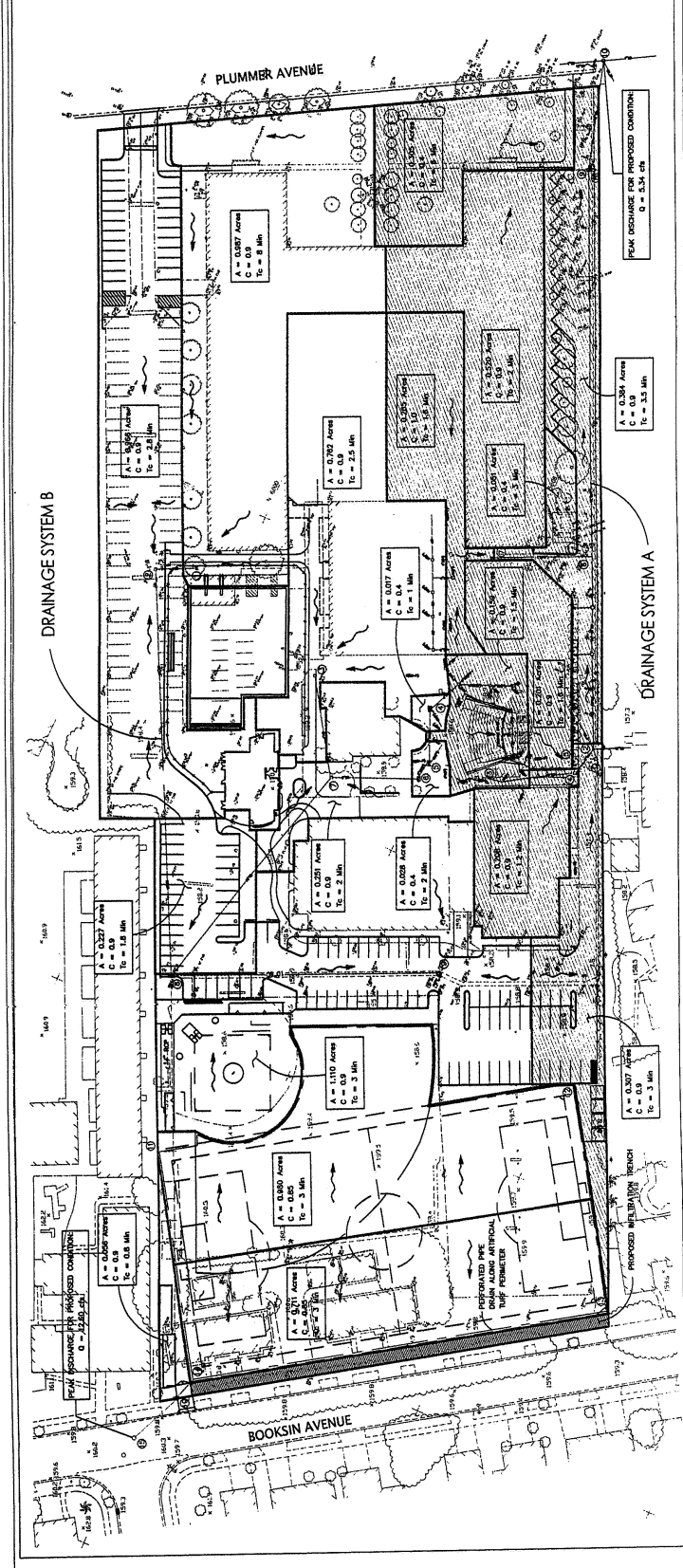
Drainage Maps



Rajappan & Meyer
CONSULTING ENGINEERS INC
1616 Lough Ave., Suite 100
Pawnee, (408) 240-2773
FAX (408) 280-6803

LEGEND

① ①



APPENDIX E

NOISE REPORT

***PRESENTATION HIGH SCHOOL
INITIAL STUDY NOISE SECTION
SAN JOSE, CALIFORNIA***

August 12, 2003



Prepared for:

**Jodi Starbird
David J. Powers & Associates
1885 The Alameda, Suite 204
San Jose, CA 95126**

Prepared by:

Richard B. Rodkin, PE

***ILLINGWORTH & RODKIN, INC.*
Acoustics · Air Quality
505 Petaluma Boulevard South
Petaluma, CA 94952
(707) 766-7700**

Job No.: 03-064

Introduction

This initial study noise section describes potential noise impacts resulting from the proposed Presentation High School Swim and Sports Field project. The project is located at 2281 Plummer Avenue and proposes the construction of a new field for soccer and field hockey, a new location for the softball field, a new swimming pool, and changes in the parking and circulation plan. The noise study includes a description of the fundamental concepts of environmental acoustics, to assist the reader, an outline of state and local guidelines used to evaluate the potential adverse noise effects, the results of a noise monitoring survey conducted to establish existing noise levels in the area, and an evaluation of the project with respect to the CEQA Initial Study Checklist questions.

Fundamental Concepts of Environmental Acoustics

Noise may be defined as unwanted sound and is perceived subjectively by each individual. The objectionable nature of sound could be considered by its pitch or its loudness. Pitch is the depth of a tone, depending on the frequency, while loudness is the intensity of sound waves. Typical sounds heard in the environment consist of a range of pitches or frequencies at different levels. Human hearing is not sensitive to sounds at all frequencies; therefore a frequency adjustment (called A-weighting) has been devised so that sound may be measured in a manner similar to the way human hearing responds. Sound pressure magnitude is measured and quantified in terms of a logarithmic scale called the decibel (dB), where 0 dB is the lowest sound level that the healthiest human ear can detect. An increase of 10 dB represents a ten-fold increase in acoustic energy and a 20 dB increase represents a sound that is 100 times more intense. Environmental sounds are usually evaluated as A-weighted sounds and expressed as dBA. Research on human sensitivity to noise indicates that a 3 dBA increase in the sound level is just detectable, while a 10 dBA increase is perceived being twice as loud. Definitions of terms commonly used to describe environmental noise are presented in Table 1. The day/night noise level (L_{dn} or DNL) is the noise level descriptor commonly used by communities to evaluate environmental noise. It is the average A-weighted noise level (expressed as dBA) during a 24-hour day, obtained after addition of 10 dBA to noise levels measured at night between 10:00 PM and 7:00 AM. Table 2 presents the range of noise levels generated by typical noise sources in the environment.

Table 1. Definitions of Acoustical Terms Used in this Report

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, Leq	The average A-weighted noise level during the measurement period.
L_{\max} , L_{\min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01} , L_{05} , L_{10} , L_{90}	The A-weighted noise levels that are exceeded 1%, 5%, 10%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Table 2 Typical Noise Levels in the Environment

Common Outdoor Noise Source	Noise Level (dBA)	Common Indoor Noise Source
120 dBA		
Jet fly-over at 300 meters		Rock concert
110 dBA		
100 dBA		
Pile driver at 20 meters		Night club with live music
90 dBA		
Large truck pass by at 15 meters		
80 dBA		
		Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters		Vacuum cleaner at 3 meters
Commercial/Urban area daytime	70 dBA	Normal speech at 1 meter
Suburban expressway at 90 meters		
Suburban daytime	60 dBA	Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	
Most quiet remote areas	10 dBA	Quiet recording studio
Threshold of human hearing	0 dBA	Threshold of human hearing

Regulatory Background

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) asks the following questions to evaluate the significance of potential project impacts. Potential noise effects from a project could be considered significant if any of the following occur:

- a. exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- b. exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- c. a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- d. a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- e. for a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels;
- f. for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Of these guidelines, items a, c, and d are applicable to the proposed project. Item b is not applicable because there are no known producers of ground-borne vibration in the project vicinity. Items e and f of the CEQA guidelines are not applicable because the project is not located within an airport land use plan, within two miles of a public use airport, or within the vicinity of a private airstrip.

CEQA does not define what noise level increase would be considered substantial. Typically, an increase in the DNL noise level resulting from the project at noise sensitive land uses of 3 dBA or greater would be considered a significant impact when projected noise levels would exceed those considered satisfactory for the affected land use (60 DNL). Where the future predicted noise level remains less than the acceptable level for the receiving land use, an increase in future noise levels up to 5 dBA DNL can be tolerated before significance occurs.

Noise Element of the City of San Jose General Plan

The City of San Jose's goal in the Noise Element of the 2020 Plan is to, "...minimize the impact of noise on people through noise reduction and suppression techniques, and through appropriate

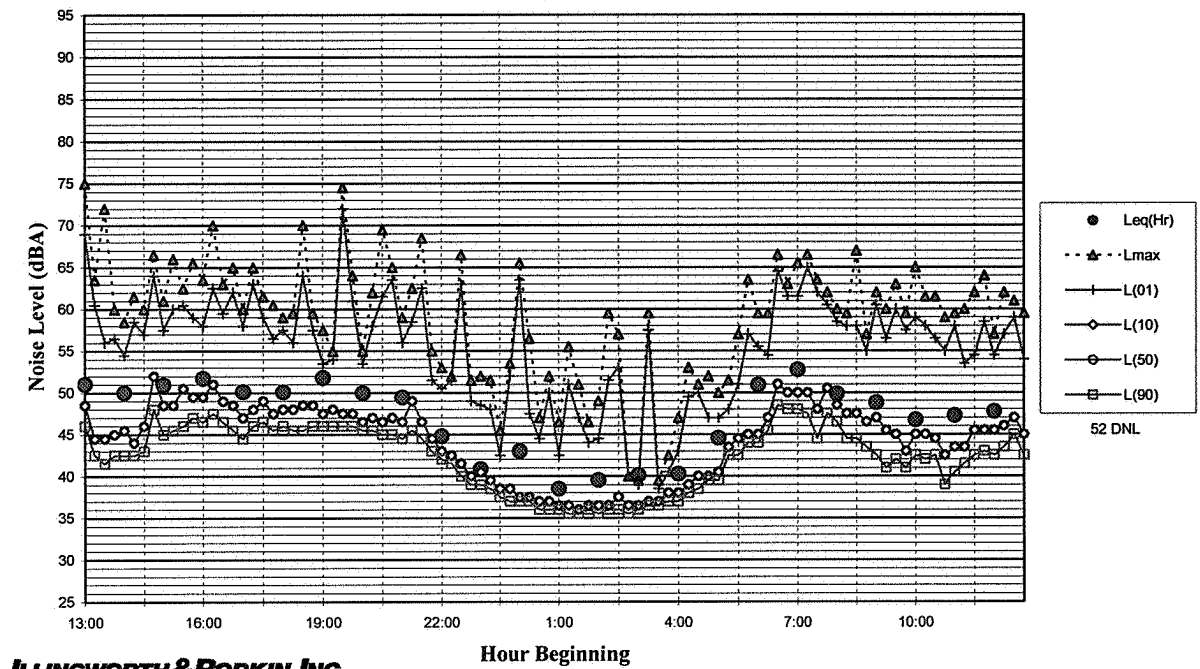
land use policies.” Policies designed in support of this goal that relate to the noise impact evaluation are as follows:

- Policy 8. The City should discourage the use of outdoor appliances (pool pumps and/or equipment), air conditioners, and other consumer products which generate noise levels in excess of the City’s exterior noise level guidelines.
- Policy 11. When located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses, non-residential land uses should mitigate noise generation to meet the 55 DNL guideline at the property line.
- Policy 12. Noise studies should be required for land use proposals where known or suspected peak event noise sources occur which may impact adjacent existing or planned land uses.

Existing Noise Environment

Presentation High School is located at 2281 Plummer Avenue. The project site is bounded by residential land uses and an elementary school. The nearest noise sensitive receptors are single-family residential homes located north and south of the project site. Three long-term noise measurements were conducted to quantify typical daytime and nighttime noise levels at the nearest residential receivers. The first measurement was conducted at the southeast corner of existing tennis courts (LT-1). This location represents the noise environment of the residences adjacent to proposed soccer and softball fields. The second measurement was conducted at the southwestern most corner of the Presentation High School property line, approximately 57 feet from the centerline of Booksin Avenue (LT-2). This location represents the noise environment of the residences adjacent to the south property line and along Booksin Avenue. The third measurement was conducted at the western end of the parking lot section designated for faculty use (LT-3). This location represents the noise environment of the residences nearest to the proposed location of the pool. Figures 1-3 show the data gathered during these measurements. Figure 4 shows the noise measurement locations.

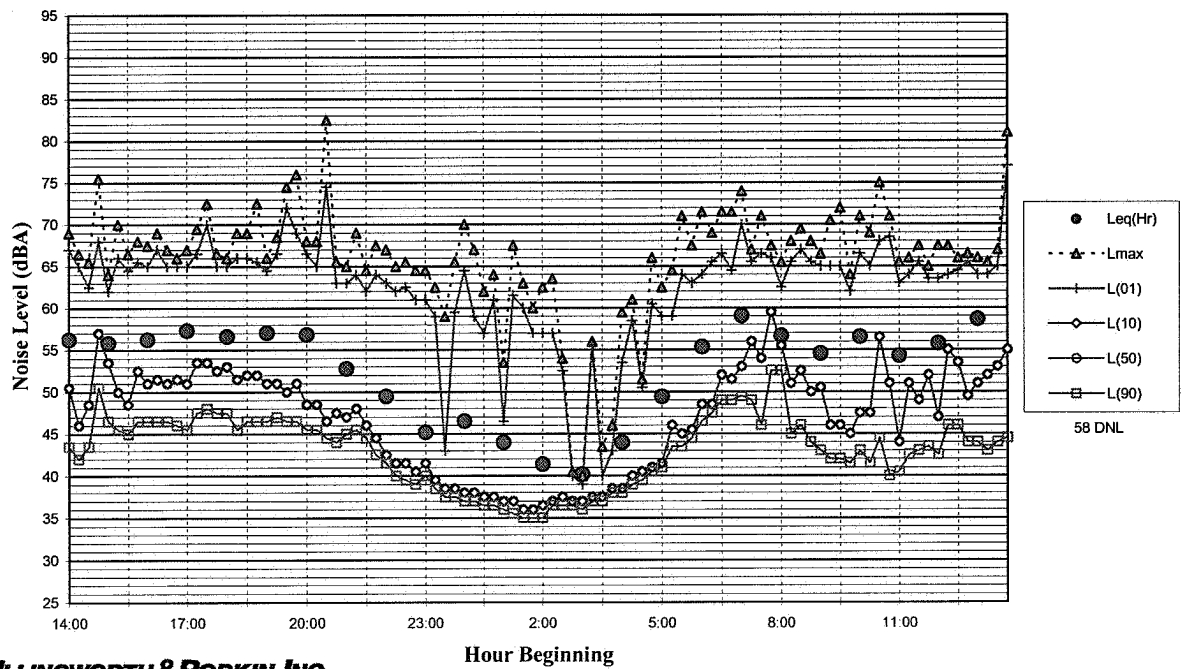
Noise Levels at LT-1
Southeast Corner of Existing Tennis Courts Near Residences
May 20-21, 2003



ILLINGWORTH & RODKIN, INC.
 Acoustics • Air Quality

Figure 1

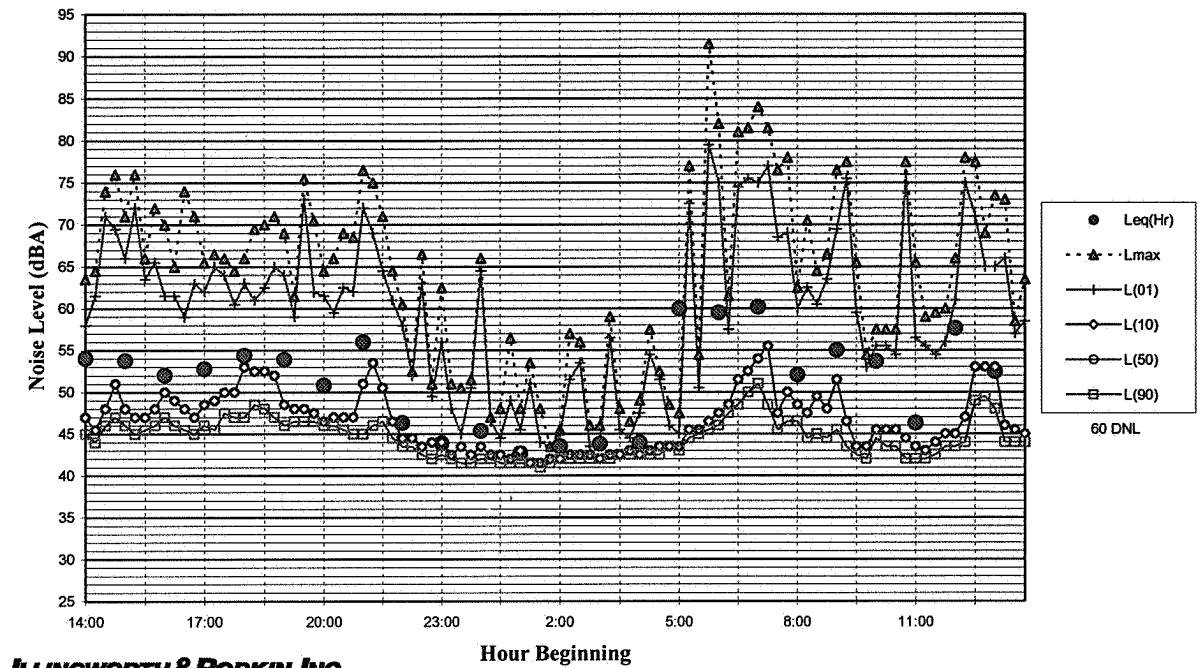
Noise Levels at LT-2
~ 57 feet from the Centerline of Booksin Avenue
May 20-21, 2003



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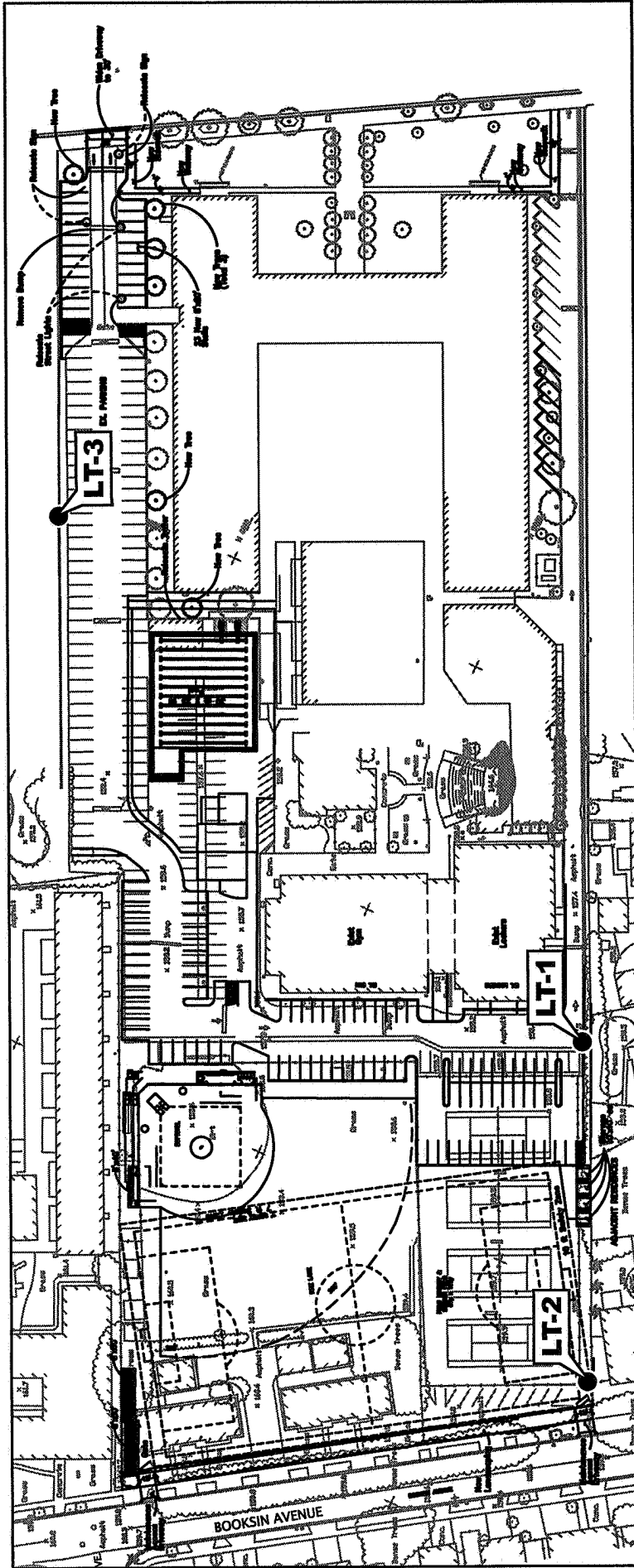
Figure 2

Noise Levels at LT-3
Faculty Parking Lot Near Proposed Pool and Adjacent Residences
May 20-21, 2003



ILLINGWORTH & RODKIN, INC.
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Figure 3



NOISE MEASUREMENT LOCATIONS

Noise Impacts and Mitigation Measures

Significance Criteria

According to CEQA, a significant noise impact would result if the project exposed persons to or generated noise levels above applicable standards. A significant impact would result if noise levels increased substantially at noise sensitive land uses. Pursuant to local planning guidelines, a substantial increase to noise levels would occur if the project resulted in an increase of 3 dBA DNL or greater at adjacent residences. Because the sound resulting from sports activities includes single-event noises, such as shouts, whistles, horns, etc., the intermittent maximum noise levels resulting from these activities are also compared to existing ambient levels to judge the intrusiveness of the noise.

Environmental Checklist

Would the Project result in...	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?				X
a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
for a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Project Description

The proposed project, along with the locations of ambient noise monitoring sites, is shown in Figure 4. A new field for soccer and field hockey would be constructed along Booksin Avenue. The softball field would be reconstructed and a new swimming pool would be constructed. Parking would be placed on the south side of the site next to the existing gymnasium to replace parking lost for the swimming pool.

The description of the project proposes outdoor lighting at the facilities. A public address (PA) system is proposed at the softball field and the pool. The PA systems would be used to announce batters, lineup changes, etc., at the softball games and to announce events during swim meets. Lighting would be used for soccer practice, at the pool before school, and for softball games that extend past sunset. Lighting would be turned off by 8:00 p.m.

Impact N-1 Residential land uses located adjacent to the proposed softball field would not be exposed to noise levels exceeding the guidelines of the Noise Element or experience a permanent increase in noise levels as a result of the project. *This is a less-than-significant impact.*

The softball field would be reconstructed basically in its same location. The field would include fencing, bleachers, dugouts, bullpen and batting cage. The softball season runs from mid February to May. Three teams play softball. Practices would occur before and after school. Home games would be played on weekdays after school. Given the configuration of the proposed softball/soccer playfields, activities on both fields would not occur at the same time.

Illingworth & Rodkin, Inc. has made measurements of the noise generated by softball and soccer games at numerous locations throughout the bay area. Noise measurements have been conducted during typical activities such as practice and league games (similar to the noise levels presented above) and at activities such as playoff games and all-star competitions which generally have higher noise levels (typical "worst-case" noise levels). While there is a range in the noise levels generated depending upon the number of participants and spectators, noise levels are typically at or below the following levels. Softball games typically generate "worst-case" noise levels of about 50 dBA L_{eq} at a distance of 240 feet from the infield. Maximum noise levels of about 58 dBA typically result from softballs being hit and shouting from players and spectators. For soccer games, the average noise level is 57 dBA L_{eq} at a distance of 160 feet from the center of the field. To represent credible "worst-case" conditions, noise levels generated by these events have been used in this analysis. PA announcements are normally at levels below the maximum levels generated by the players and spectators.

The nearest residential uses are located approximately 240 feet west and south of the softball infield. Residences west of the site, along Booksin Avenue, would be exposed to L_{eq} noise levels of about 50 dBA and maximum noise levels of about 58 dBA during softball games. Noise levels would be similar at residential land uses south of the project site. Based on the noise measurements made at LT-2, L_{eq} noise levels generated by softball would typically be about 5 to 8 dBA below L_{eq} noise levels generated by traffic along Booksin Avenue. During hours where softball practice or games occur, overall L_{eq} noise levels at receivers west of the project site

would be at most 1 decibel higher than existing levels. DNL noise levels would not measurably increase over existing levels at receivers west of the softball field.

Softball generated noise levels would be approximately equal to the existing daytime noise levels at receivers south of the project site. L_{eq} noise levels at receivers south of the project site would be at most 3 decibels higher than existing levels when softball games or practice occurs. Assuming that softball games or practices would last up to 4 hours per day, DNL noise levels would increase by less than one decibel over existing levels at receivers south of the softball field. This would not be a perceptible increase in DNL noise levels although activities on the softball field would be audible. DNL noise levels generated by softball would not exceed 55 DNL at the southernmost property line.

Impact N-2 Residential land uses located adjacent to the proposed soccer/field hockey field would not be exposed to noise levels exceeding the guidelines of the Noise Element or experience a permanent increase in noise levels as a result of the project. *This is a less-than-significant impact.*

A new field for soccer and field hockey would be constructed parallel to Booksin Avenue. The soccer season runs from early November through mid February. Three teams play, including varsity, junior varsity, and freshman. Practices would occur before or after school. Home games would be played on varying days during the week after school. The center of the proposed soccer/field hockey field is located about 160 feet from the nearest receivers to the west and south. Residences west of the site would be exposed to L_{eq} noise levels of about 57 dBA during soccer games or practice. It is assumed that noise generated by field hockey activities would be similar to those generated by soccer. L_{eq} noise levels generated by these sports would be similar to L_{eq} noise levels generated by vehicular traffic along Booksin Avenue at receivers west of the field. When practice or games occur, overall L_{eq} noise levels at receivers west of the project site would be at most 3 decibels higher than existing traffic noise levels.

Noise levels generated by soccer or field hockey would be approximately 5 to 8 dBA L_{eq} higher than existing levels at receivers south of the project site that are shielded from traffic noise generated by Booksin Avenue. When practice or games occur, overall L_{eq} noise levels would be about 6 to 9 dBA L_{eq} higher than existing noise levels at receivers south of the project site.

DNL noise levels would not measurably increase over existing levels at receivers west of the field, but would increase by about 2 decibels at receivers south of the project site since the existing noise environment is lower. The noise level increase at receivers south of the field would be less than 3 dBA DNL, therefore the impact would be considered less-than-significant. DNL noise levels generated by soccer or field hockey would not exceed 55 DNL at either property line.

Impact N-3 Residential land uses located north of the proposed swimming pool would not be exposed to noise levels exceeding the guidelines of the Noise Element or experience a substantial permanent increase in noise levels as a result of the project. *This is a less-than-significant impact.*

A new swimming pool would be designed to accommodate swimming and competitive swimming and water polo teams, and physical education. The pool site has been designated in the parking lot. The competitive swim season runs from mid February to May. The water polo season runs from September through November. Two teams compete in each sport, including varsity and junior varsity. Practices would occur before and after school. Home meets would be on varying days during the week after school and during weekends.

Noise generated at the swimming pool would primarily consist of shouting, splashing, whistles and horns and occasional cheering during practices and meets. The shouting and whistles are the loudest sounds expected at the pool and would occur regularly during team practices and meets. Whistles would occur primarily during water polo matches and the starting horn is sounded to start each competitive race. Occasional applause accompanies the events. Measurements conducted near swimming pools and data in literature are used to estimate noise levels generated at the pool

Shouting typically generates maximum A-weighted noise levels of 88 to 93 dBA measured at one meter from the source(s). Whistles generate similar levels. Sounds of splashing are more frequent, but at levels typically 10 to 15 dBA lower. At the nearest residential property line maximum noise levels are calculated to range from 61 to 66 dBA. The PA system would be used to announce events. Sound levels from the PA system would be in the same range as described above. Hourly average noise levels during competitive swimming and water polo practices are calculated to be about 50 to 55 dBA L_{eq} . Competitive events could generate higher levels because of increased numbers of participants with average hourly levels expected to reach a maximum of 55 to 60 dBA L_{eq} at the nearest property line. The maximum daily average noise level resulting exclusively from use of the pool as measured at the nearest residential property line would be 52 dBA DNL.

Maximum intermittent noises and hourly average levels would fall within the range of noise levels currently existing in the area. The existing ambient DNL noise level at the property line is 60 dBA. The addition of swimming pool noise would cause the DNL to change by less than 0.5 dBA. Sounds from the pool would be audible on neighboring properties, but there would not be a substantial increase in intermittent maximum, hourly average, or daily noise exposure levels. This is a less than significant impact.

Impact N-4 Residential land uses located adjacent to the reconfigured parking lot near the existing tennis courts would not be exposed to noise levels exceeding the guidelines of the Noise Element or experience a permanent increase in noise levels as a result of the project. *This is a less-than-significant impact.*

Parking would be placed on the south side of the site next to the existing gymnasium to replace parking lost for the swimming pool. This area is currently used for tennis. The removal of the existing tennis courts would eliminate the noise generated by tennis. Noise generated by normal activities within the expanded and reconfigured parking lot would be introduced into the noise environment at the nearest residential receptors south of the project site with the operation of the project. Noise would be generated by vehicles circulating within the lot, engine starts, door slams, and by the sound of human voices. The sound of a passing car at 15 mph typically ranges from 55 dBA to 65 dBA at 25 feet. The noise of an engine start is similar. Door slams

create noise levels lower than engine starts. The hourly average noise level resulting from all of these noise generating activities could range from 40 dBA to 50 dBA at the property line. At the nearest residences, parking lot L_{eq} noise levels would generally fall below ambient noise levels, although these sounds would be audible. The parking lot would not substantially increase DNL noise levels above existing levels and DNL noise levels generated by the parking lot would not exceed 55 dBA.

Impact N-5 Noise generating activities associated with the construction of the proposed project would temporarily elevate noise levels at noise sensitive receptors adjacent to the project site. The durations of noise generating activities associated with the construction of the playfields and pool are each expected to be about four months. *This is a less-than-significant impact.*

The construction of the project would generate noise, and would temporarily increase noise levels at adjacent receptors. Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. Construction activities generate considerable amounts of noise, especially during the demolition phase and the construction of project infrastructure when heavy equipment is used.

The highest maximum noise levels generated by project construction would typically range from about 90 to 98 dBA at a distance of 50 feet from the noise source. Typical hourly average construction generated noise levels are about 81 dBA to 89 dBA measured at a distance of 50 feet from the center of the site during busy construction periods. Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor. Shielding provided by buildings or terrain result in much lower construction noise levels at distant receptors.

Given the proximity of adjacent residential land uses to the construction activities, all phases of project construction, especially demolition and the construction of project infrastructure, would exceed the ambient noise environment at these adjacent receptors, and may interfere with normal activities during busy construction periods.

Typically, small residential, commercial, or office construction projects do not generate significant noise impacts when standard construction noise control measures are enforced at the project site and when the duration of the noise generating construction period is limited to one construction season (typically one year) or less. Construction noises associated with projects of this type are disturbances that are necessary for the construction or repair of buildings and structures in urban areas. Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction materials, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life.

Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time. Limiting the hours when construction can occur to daytime hours is

often a simple method to reduce the potential for noise impacts. In areas immediately adjacent to construction, controls such as constructing temporary noise barriers and utilizing "quiet" construction equipment can also reduce the potential for noise impacts.

The major noise generating activities associated with project construction would include the demolition of existing structures, site preparation, and construction of project infrastructure, the construction of the playfields and pool, and the expansion and reconfiguration of the parking lot. Demolition and construction of the pool and fields are expected to take four months each, and could occur months apart depending upon funding. During the demolition period, a large amount of heavy equipment, including material hauling trucks, would be expected. Noise levels generated during the demolition and construction of the pool would be expected to be the highest at the beginning of the phase where demolition, excavation and pool construction occurs. Noise generated by other minor activities (e.g., landscaping) would not be expected to adversely affect the nearest noise sensitive land uses.

Construction Noise Control Measures

Although the impact is less than significant, the following measures should be implemented at the construction site to reduce the effects of construction noise on adjacent residential land uses:

- Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours 7:00 a.m. to 7:00 p.m., Monday through Friday and from 9:00 a.m. to 6:00 p.m., on Saturday. No construction activities should occur on Sundays or holidays.
- Construct temporary noise barriers to shield adjacent noise-sensitive land uses from construction noise prior to the demolition phase of the project. The temporary noise barriers should be at least 8 feet in height to be effective.
- Equip all internal combustion engine driven equipment with intake and exhaust mufflers which are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Avoid staging of construction equipment within 200 feet of residences and locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far practical from existing noise sensitive receptors. Construct temporary barriers to screen stationary noise generating equipment when located in areas adjoining noise sensitive land uses. All construction will be staged on the project site.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- Route all construction traffic to and from the project site via designated truck routes. Prohibit construction related heavy truck traffic in residential areas where feasible. Prohibit construction truck traffic in the project vicinity during non-allowed hours.

- Control noise from construction workers' radios to the point where they are not audible at existing residences bordering the project site.
- Notify adjacent residents to the project site of the construction schedule in writing.
- Designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. (The City should be responsible for designating a noise disturbance coordinator and the individual project sponsor should be responsible for posting the phone number and providing construction schedule notices).
- The construction noise control measures identified above should be clearly posted at the project site.

M E M O

To: Jodi Starbird, David J. Powers & Associates
From: Richard B. Rodkin, PE
Date: October 31, 2003
SUBJECT: **Presentation High School – Report of Supplementary Noise Measurements Along Booksin Avenue**

At your request, we submitted a paragraph to be inserted in the noise analysis in a memo to you dated October 9, 2003 regarding the affect of removal of duplexes on softball field noise. Subsequent to that, you requested that we conduct an additional noise measurement along Booksin Avenue to characterize ambient noise levels in the area near the duplexes. The original noise study included a noise level measurement 57 feet from the centerline of Booksin Avenue which was completed to characterize ambient noise levels along Booksin Avenue so that the analysis of the noise impacts of onsite operations and changes in traffic noise could be assessed for the Booksin Avenue residences.

The following memo summarizes the subsequent ambient noise measurements along Booksin Avenue and the implications of removing the duplexes on onsite-generated noise as heard at the residences across Booksin Avenue.

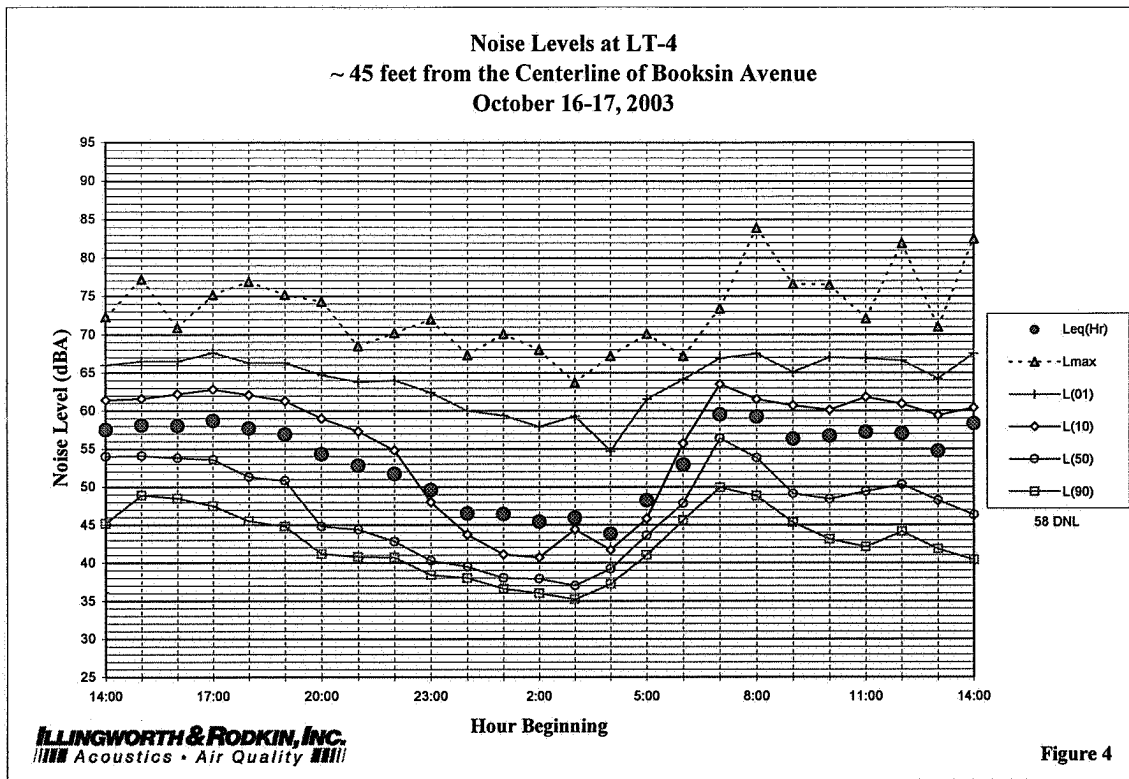
Duplexes are located along Booksin Avenue on the west side of the softball field. The proposed project would replace the duplexes with a soccer/field hockey field. Ambient noise levels were monitored along Booksin Avenue at the corner of the project site 57 feet from the centerline of the roadway. These data were presented in Figure 2 (measurement Location LT-2). The measured day/night average noise level was 58 DNL. Typical hourly average noise levels during the daytime range from 55 to 60 dBA. Noise levels along Booksin Avenue were confirmed through a subsequent measurement conducted on October 15-17, 2003. Measurements were conducted in front of 2282 Booksin Avenue 45 feet from the roadway centerline. This measurement location is designated LT-4 and the measured sound levels are summarized in the attached figure. The measured data from October confirm the ambient noise measurements conducted in May.

The analysis of softball field noise levels concludes the noise from softball would be substantially below the Booksin Avenue traffic noise, assuming the duplexes are removed. Because projected noise levels from the games would be substantially below traffic noise, removal of these buildings would not cause a significant difference in noise from the softball fields. There may be occasional audible sounds during lulls in traffic which would not now

be heard because of the buffering provided by these duplexes, but there would be no difference in measured noise levels at the Booksin Avenue residences. Similarly, the analysis of noise from soccer games assumed the proposed location of the soccer fields where the duplexes currently exist. No credit for sound buffering was included in the analysis for the presence of the duplexes.

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Attachment

Figure 4 Measured Noise Levels



APPENDIX F

TRAFFIC REPORT

MEMORANDUM

To: Sharon Drake, Presentation High School
Keith Meyer, Rajappan & Meyer

From: Gary Black
Jaskamal Singh

Date: August 11, 2003

Subject: Traffic Study for Presentation High School Phase II Sports Field Improvements

Hexagon Transportation Consultants, Inc. has completed its traffic study for the proposed Presentation High School Phase II Sports Field Improvements in San Jose, California. This study was conducted under the direction of City of San Jose staff in accordance with their scope of work. Our findings are described below.

Introduction

Presentation High School is located on Plummer Avenue, between Curtner Avenue and Darlene Avenue (See Figure 1). The school is surrounded generally by single family homes. Current access to the school is provided via two driveways on Plummer Avenue. The northern driveway (20 feet wide) accommodates two-way traffic, and the southern driveway is one-way outbound (15 feet wide). There is a circulation road behind the school buildings that connects the two driveways and the parking area. There are a total of 200 parking spaces on the campus. A loading area is provided on Plummer Avenue along the school frontage and is delineated with white curb and signs, which restrict the loading zone periods to before and after school. The school has no existing onsite bus service. VTA bus service is provided on Curtner Avenue.

Presentation High School is proposing a Phase II Sports Field Improvement. The project consists of the addition of a soccer field (also used for field hockey) and a swimming pool. These facilities will include two 150-seat bleachers: one for soccer, softball, and field hockey games; and the other for swimming and water polo. The addition of these facilities will allow the school to host games and meets, which are not possible now, and which could increase traffic to and from the school at certain times. As a part of the project, the existing tennis courts and two duplexes will be removed to make way for the field and reconfigured parking area. The pool will be built in the part of the existing parking lot. Parking will be reconfigured so there will be no change in the total number of on-site spaces. Presentation High School has a current enrollment of 750 students, which will not increase. School hours are generally 7:40AM to 2:40PM, Monday through Friday. After school sports activities generally end between 5:30 and 7:00 PM.

Existing Conditions

The existing traffic operations at Presentation High School and the surrounding streets were evaluated. Two methods were used. First, field observations were performed during the hours before and after school. These observations noted the school's impact on parking and traffic flow on the surrounding streets as well as the existing onsite circulation. Second, level of service calculations were conducted for the PM (4:00 PM – 6:00 PM) peak hour period. Off-site traffic impacts were not analyzed for the AM peak period.

Not to Scale

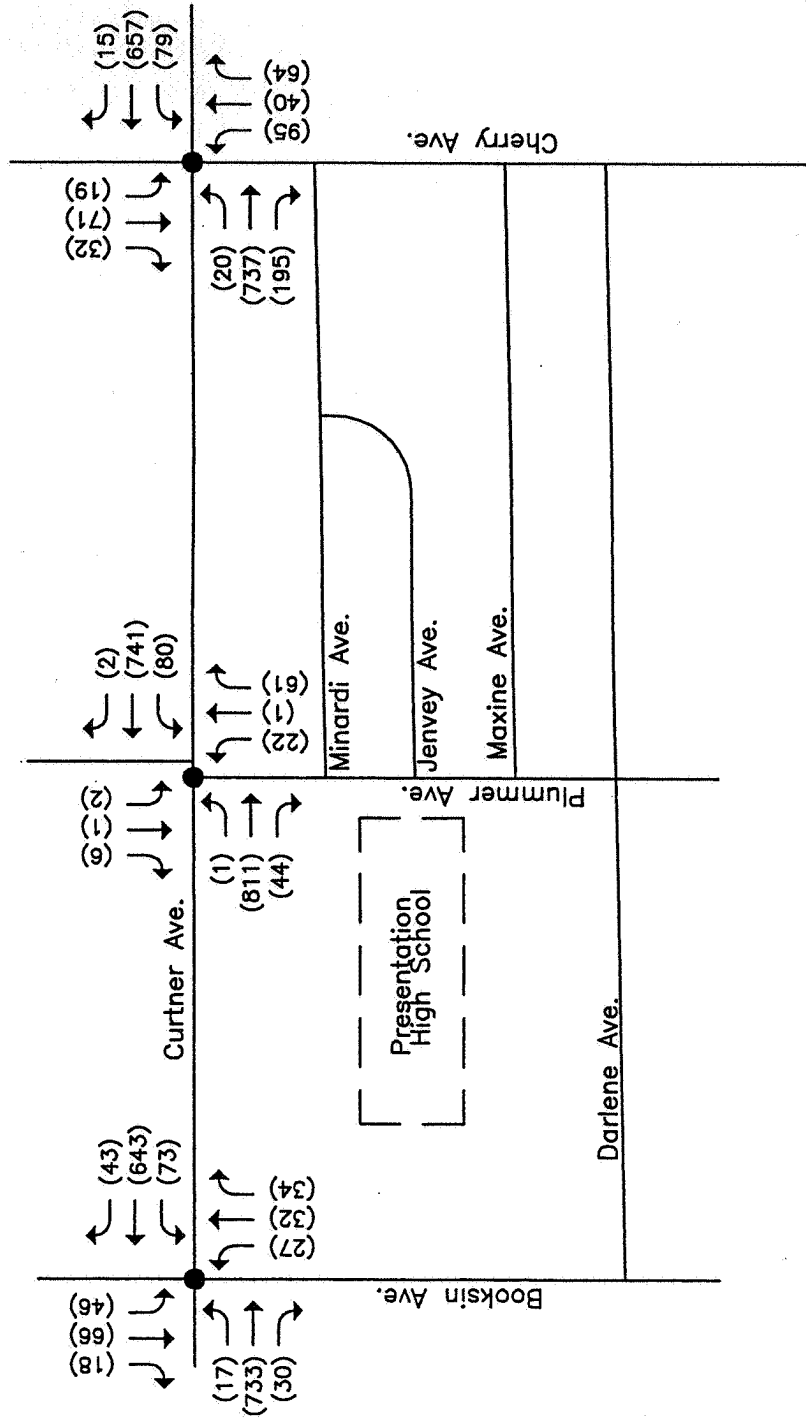


Figure 1
EXISTING AND BACKGROUND CONDITIONS
Presentation High School

because the sports facilities would not generate any morning traffic. The following intersections were evaluated:

- Curtner Avenue/Booksin Avenue (signalized)
- Curtner Avenue/Plummer Avenue (stop controlled on Plummer)
- Curtner Avenue/Cherry Avenue (signalized)

The results of the existing operations review are described below.

Traffic Flow on Plummer Avenue

School traffic peaks for approximately 20 minutes before and after school, a total of 40 minutes per day. During these peak periods, traffic congestion on Plummer Avenue is significant and queues of 5 or more vehicles are common both northbound and southbound. These queues stem the following:

- Vehicles turning in and out of the school's driveways
- Students crossing Plummer Avenue after parking in the adjacent residential neighborhood
- Parents loading/unloading students while queued on Plummer or other streets

The majority of the delay on Plummer Avenue is caused by turning vehicles. Traffic on Plummer Avenue right before and after school hours is slow (5-10mph). However delay runs on Plummer Avenue during the school's peak periods revealed that the delay for through traffic due to congestion was seldom more than one minute. Although conditions are congested, traffic does circulate and dissipate in a reasonable amount of time.

During the school's peak periods, ambient traffic levels (traffic not caused by the school) on Plummer Avenue are minor, with more ambient traffic during the morning than the afternoon. It appears that the surrounding neighborhood has adapted to the peak hour traffic in front of the school by using alternative routes.

A seven-day tube count was conducted on Plummer Avenue, adjacent to the high school (See Figure 2). Volumes were highest in the morning when school starts and in the afternoon when school lets out. Volumes were lower in the later afternoon and evening and much lower on weekends. Thus, the times when the sports activities will add traffic are times of low ambient traffic.

Site Access

The northern driveway has 160 linear feet of outbound queuing space, and the southern driveway has 580 feet of outbound queuing space. Assuming 20 feet per queued vehicle, these driveways can accommodate queues of 8 and 29 vehicles, respectively. During the AM peak hour, inbound traffic is heavy, and vehicles queue on Plummer Avenue northbound and southbound at the northern driveway. The outbound queue at the northern driveway rarely exceeds one vehicle during the morning. Most outbound trips during the AM peak hour exit the site at the southern driveway, and the queue at this location rarely exceeds 5 vehicles.

After school, inbound queues on Plummer Avenue due to vehicles turning into driveways are shorter. Outbound queues at the northern driveway are typically between one and four vehicles, and queues at the

15 minute counts at Plummer Ave

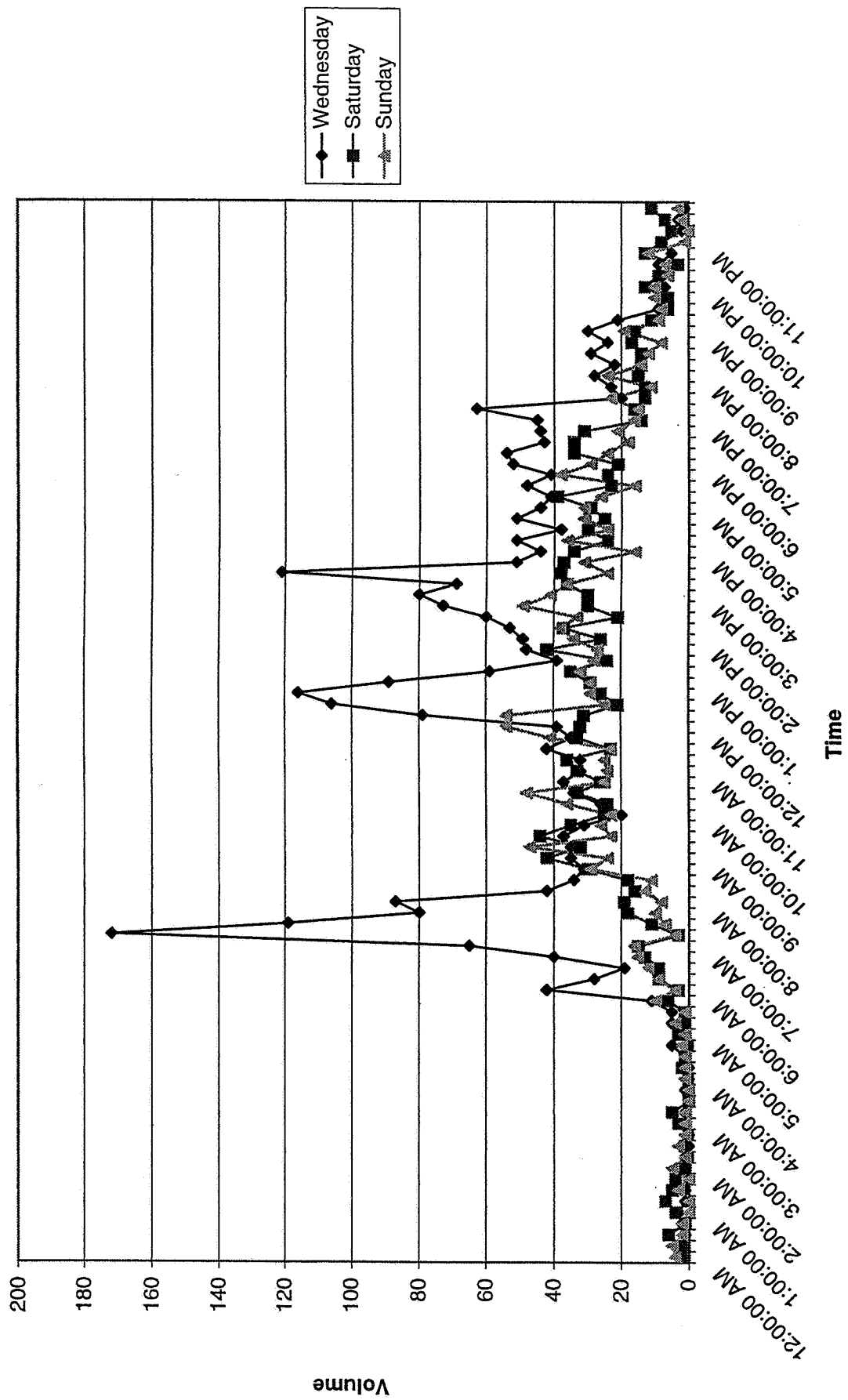


Figure 2

south driveway are on the order of 20 vehicles. It should be noted, however, that the long queue at the southern driveway dissipates fairly quickly. One operational problem noted was that vehicles commonly park in the red curb areas near the northern driveway on Plummer Avenue. This results in poor sight distance at the driveway.

Student Loading

Drivers load and unload passengers in two main areas: onsite between the existing cafeteria and gymnasium, and the on street loading area on Plummer Avenue. In the morning, the number of vehicles stopped or parked due to drop-offs is much less than after school. Unloading tends to be much quicker because drivers do not wait for students. The result is that the loading areas tend to have plenty of capacity in the morning. In the afternoon, drivers park in the loading areas and wait for school to end. Once the loading areas fill, drivers stop in "No Parking" areas. Also, several students walk to areas offsite to be picked up.

Existing and Background Levels of Service

The three study intersections currently operate at acceptable levels of service (See Table 1). Traffic counts and LOS calculations sheets are shown in the attached Appendix. Background conditions are identical to existing conditions, because there are no approved projects in the area. According to the peak hour signal warrant (Caltrans Warrant 11), a traffic signal is not warranted at the Plummer Avenue and Curtner Avenue intersection.

Table 1
Level of Service

Intersection	Peak Hour	Existing & Background Conditions		
		Count Date	Avg Delay	LOS
Booksin/Curtner	PM	3/13/2003	4.3	A
Plummer/Curtner	PM	3/13/2003	10.3	B
Cherry/Curtner	PM	3/13/2003	9	B

Proposed Project Conditions

The proposed project will consist of the addition of a soccer field (also used for field hockey) and a swimming pool. These facilities will include two 150-seat bleachers: one for soccer, softball, and field hockey games; and the other for swimming and water polo. As part of the project, the existing tennis courts and two duplexes will be removed to make way for the field and reconfigured parking area. Also, to make room for the pool, the existing school parking lot will be modified. Access and circulation will remain the same as today except that the main driveway will be widened.

Not to Scale

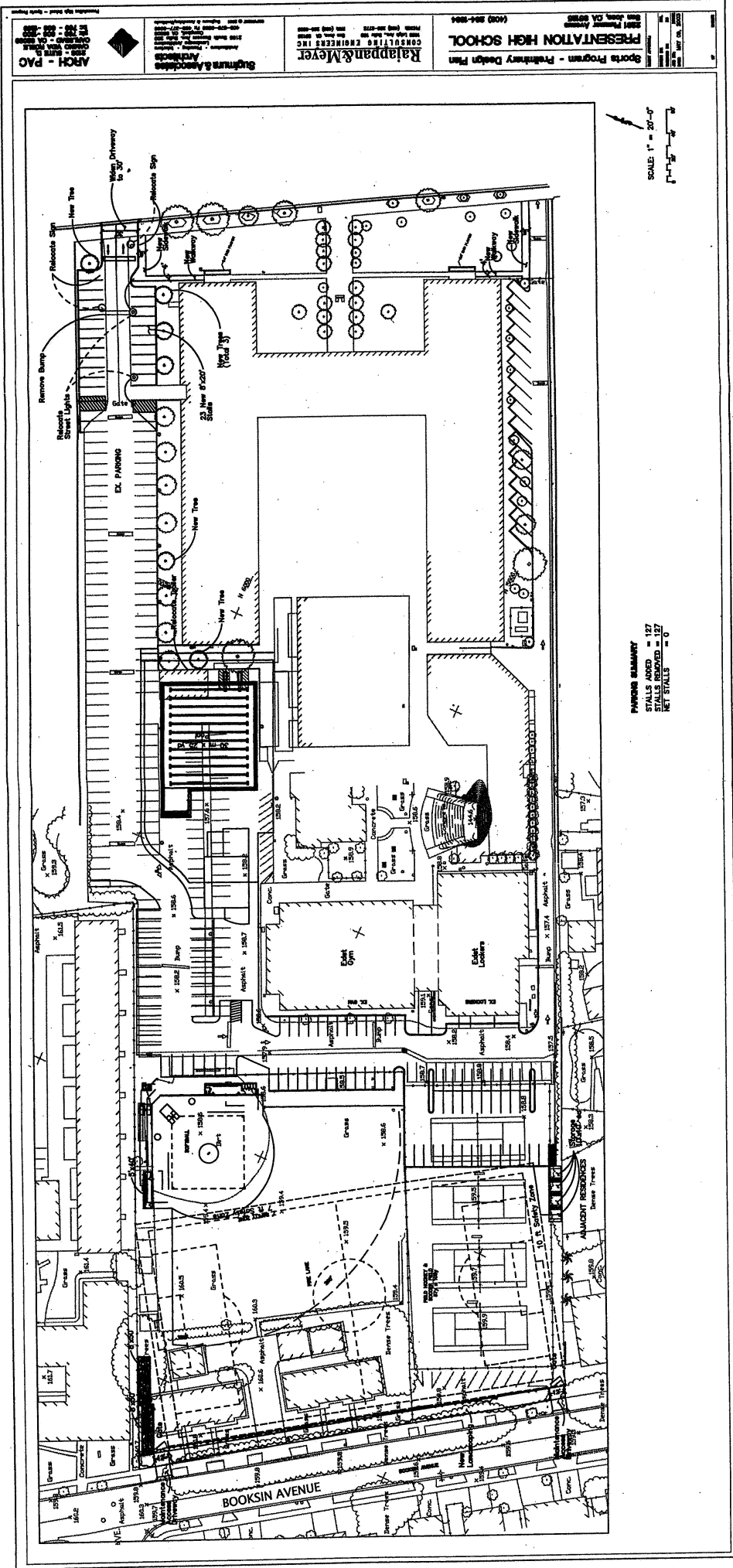


Figure 3

SITE PLAN

Presentation High School - Phase II Sports Field Improvements.

Hexagon Transportation Consultants, Inc.

Trip Generation, Distribution & Assignment

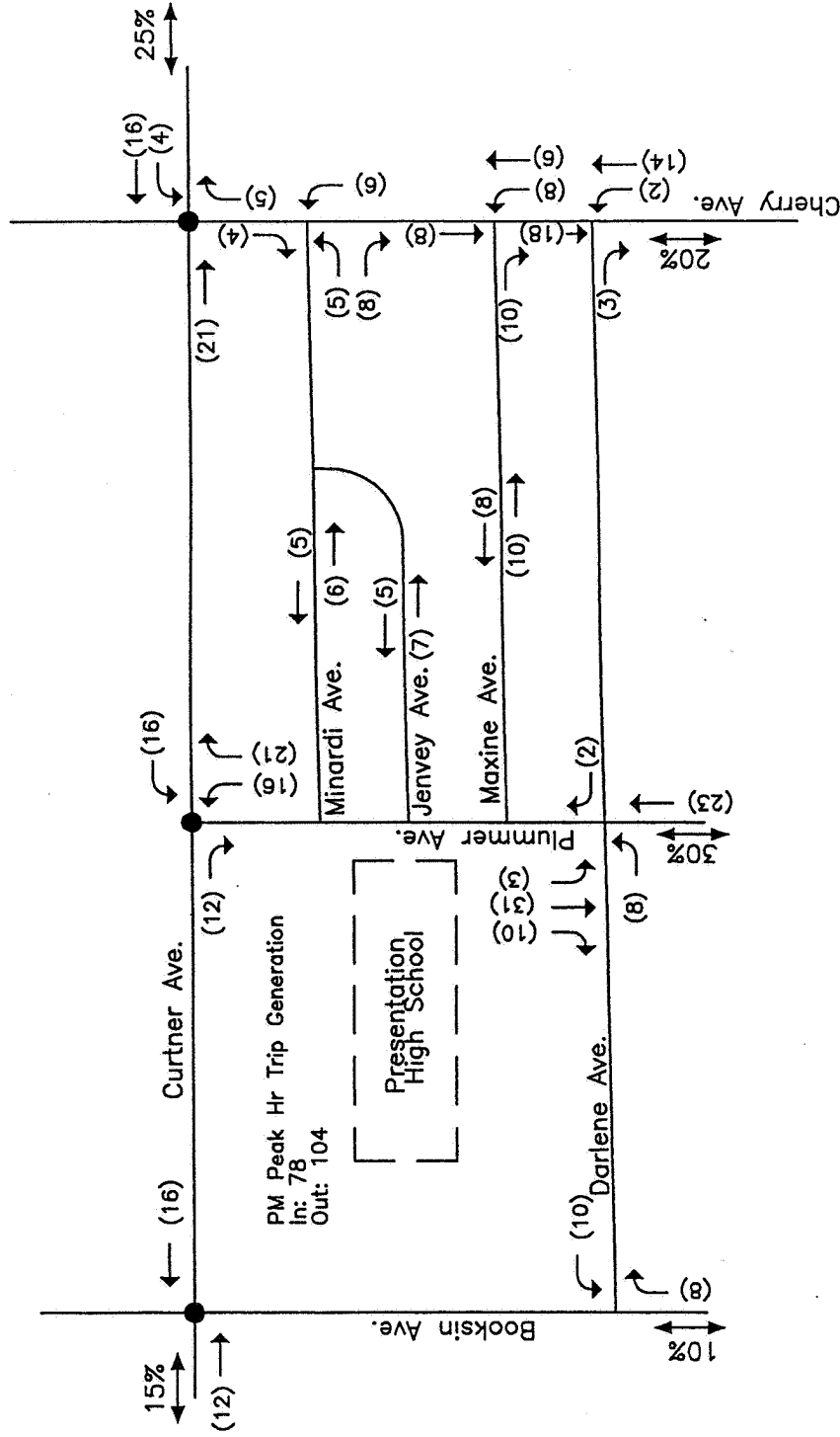
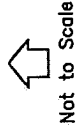
The project trip generation is estimated based on the existing and expected future sports schedules supplied by Presentation High School (See Table 2). It is assumed that 75% of the students in the sports program will need to be picked up after practice or games. Out bound PM peak hour project trips are shown for two scenarios, regular practice and matches. Regular practices typically occur after school and end at 5:00 or 6:00PM. Practices ending at 6:00 PM will not affect the PM peak hour. The number of students participating in each sport varies from 30 to 100. February will be the busiest month because soccer, softball, and swimming will be practicing simultaneously. Matches, games, or meets typically occur twice per month on weekdays and occasionally on Saturdays. These will have visiting teams and spectators. The greatest impact will occur when a match ends around 5:00PM. All other sports activities will not affect the PM peak hour. Offsite traffic impacts were calculated for the highest-volume scenario in which a soccer match ends at 4:30pm. There would be 17 trips inbound as parents pick up their students and 134 trips outbound as students, coaches, and spectators leave the match. On days when there are no matches, which is most days, the PM peak hour traffic impacts would be less. The estimated project trips will be assigned to the local roadway based on the trip distribution pattern shown in the Figure 4. Summary of existing and future sports schedule for onsite and offsite games are shown in the Appendix.

Table 2
Trip Generation

Month	Peak Hour	In		Out		No. of matches per month
		Practice	Match	Practice	Match	
September-05	PM	41	31	54	0	4
October-05	PM	35	37	46	0	3
November-05	PM	0	17	0	134	2
December-05	PM	0	17	0	134	2
January-06	PM	0	17	0	134	5
February-06	PM	78	17	104	134	1
March-06	PM	78	0	104	0	0
April-06	PM	78	0	104	0	0
May-06	PM	78	0	104	0	0
June-06	PM	0	0	0	0	0

Levels of Service

Levels of service will remain acceptable with the project (See Table 3). Under project conditions, the three study intersections will operate at LOS B or better during the PM peak hour. Project traffic will have the greatest effect on the intersection of Plummer Avenue and Curtner Avenue. According to the peak hour signal warrant (Caltrans Warrant 11), however, a traffic signal will not be warranted at this location. Drivers will utilize gaps in traffic created by the two adjacent signalized intersections to make left turns at this location.



LEGEND

- XX(XX) = AM Peak Hour (PM Peak Hour)
- XX% = Denotes % of Existing School Traffic
- = Denotes Study Intersection

Figure 4

PROJECT TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Presentation High School

Table 3
Level of Service

Intersection	Peak Hour	Existing Conditions		Existing Conditions + Project Trips	
		Avg Delay	LOS	Avg Delay	LOS
Curnter/Booksin	PM	4.3	A	4.3	A
Curtner Plummer	PM	10.3	B	10.8	B
Curtner/Cherry	PM	9	B	9	B

Parking Survey & Analysis

The project will modify the site access and parking lot. The parking spaces in the back of the school will be removed and reconfigured as part of the pool project. These spaces will be replaced by removing some of the landscaped area at the northern driveway and by adding spaces to the lot by the southern driveway. The total number of parking spaces will remain unchanged.

A parking survey was conducted after school hours to estimate number of parking spaces available for sports events. The school has 200 parking spaces. The survey showed 100 to 130 vacant spaces in the afternoon. The maximum number of spectator cars expected for a sporting event is 35, which can be accommodated in the school parking lot.

Site Access and Circulation

The proposed project will maintain access around the back of the school from the main parking lot to the southern driveway. The driveway will be widened (from 20' to 30') to allow easier bus access for visiting teams.

Construction Impacts

The most noticeable traffic impact during construction will be hauling construction materials and excavated soil to/from the site. The major excavation will be the swimming pool and removing some top soil in the field area. The major import will be the crushed rock base for the field. The hauling of construction materials and excavated soils will be done in different months. There will be 2550 cubic yards of soil to be hauled out from the site and 2500 cubic yards of crushed rock to be hauled into the site. A truck can carry about 10 cubic yards per trip. Therefore there will be 255 truck round trips for exporting soil and 250 round trips for importing the rock. Estimating 15 trip per day yields 17 to 20 days for each task. Because this construction traffic will be a temporary impact, it is not considered to be a significant impact.

In addition to excavation, the other construction traffic mostly will involve workers to and from the site. If possible, construction will be scheduled during the summer when school is not in session. In any event, parking for construction workers will be entirely within the construction area. So there will be no impact on school on neighborhood parking. Also, construction workers will arrive before the students and leave after the students, which will minimize peak hour traffic impacts.

Conclusions

The proposed project will result in more sports activities on site after school. This will cause some increase in trips during the PM peak hour when students leave after practices and games. However, all intersections will operate at LOS 'C' or better during the PM peak hour. According to the peak hour signal warrant (Caltrans Warrant 11), a traffic signal will not be warranted at the intersection of Plummer Avenue and Curtner Avenue. Seven-day counts show the comparison between typical weekday and weekend traffic on Plummer Avenue. This shows that other time periods during the week when sports activities might be held are not a concern because of low ambient traffic.

To facilitate bus access the main driveway should be widened to 30 feet. Also, bulb-outs should be considered around the driveway to prevent illegal parking, which can block sight distance.

Appendix

- Traffic Counts
- Volume Sheets
- LOS Calculations
- Signal Warrant Calculation
- Sports Schedules

MARKS TRAFFIC DATA SERVICE

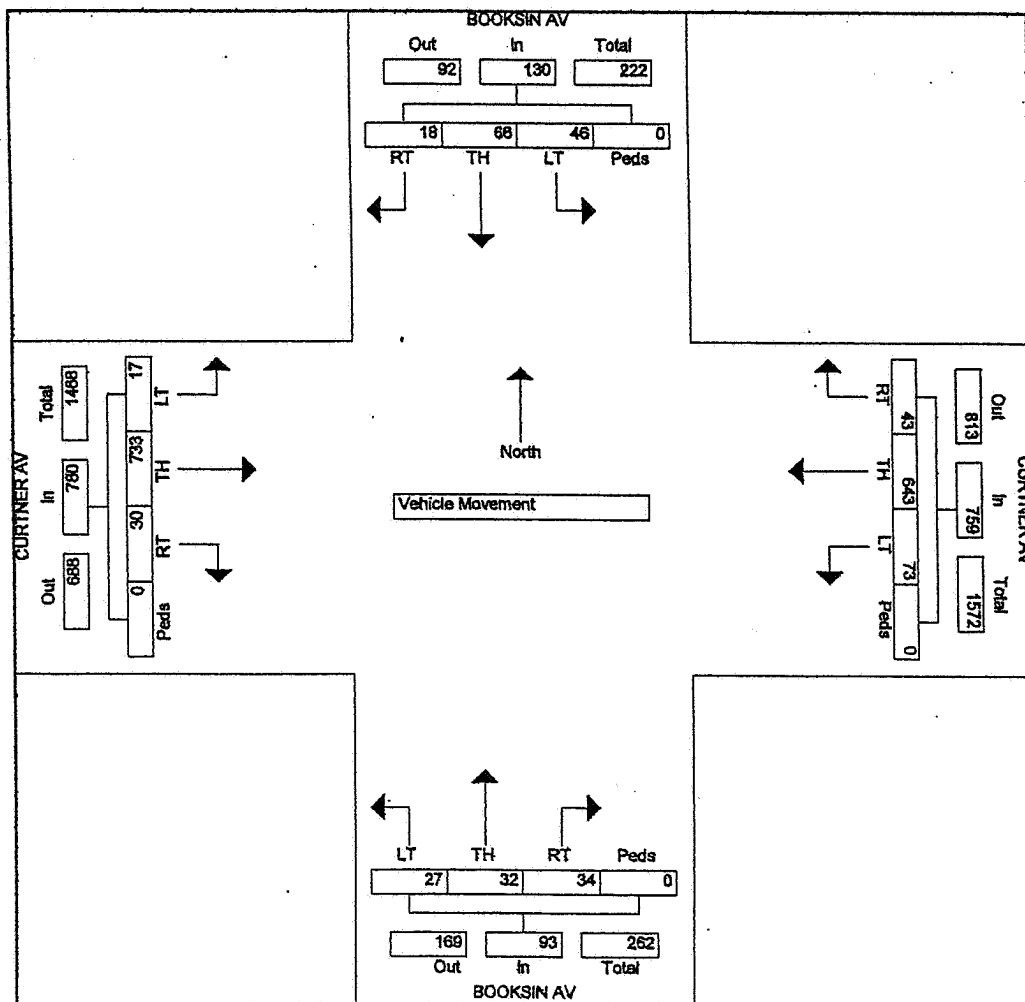
01
SAN JOSE
TEX RA
CITO [916] 715 - 4006

File Name : booksin.curtner.p
Site Code : 00000000
Start Date : 03/13/2003
Page : 1

Groups Printed: Vehicle Movement

	BOOKSIN AV Southbound				CURTNER AV Westbound				BOOKSIN AV Northbound				CURTNER AV Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	5	12	9	26	9	154	9	172	14	11	5	30	7	178	3	188	416
16:15	7	13	11	31	9	142	19	170	9	10	6	25	11	168	4	183	409
16:30	0	12	18	28	16	117	13	146	9	10	11	30	10	189	5	204	408
16:45	3	13	12	28	7	156	18	181	8	7	10	25	5	199	5	209	443
Total	15	50	48	113	41	569	59	669	40	38	32	110	33	734	17	784	1676
17:00	5	22	12	39	11	171	13	195	5	7	9	21	6	181	5	192	447
17:15	3	12	14	29	11	155	22	188	10	9	3	22	10	181	6	197	436
17:30	7	19	8	34	14	161	20	195	11	9	5	25	9	172	1	182	436
17:45	2	16	11	29	12	154	14	180	12	8	4	24	3	169	3	175	408
Total	17	69	45	131	48	641	69	758	38	33	21	92	28	703	15	746	1727
Grand Total	32	119	93	244	89	1210	128	1427	78	71	53	202	61	1437	32	1530	3403
Approch %	13.1	48.8	38.1		6.2	84.8	9.0		38.6	35.1	26.2		4.0	93.9	2.1		
Total %	0.9	3.5	2.7	7.2	2.6	35.6	3.8	41.8	2.3	2.1	1.6	5.9	1.8	42.2	0.9	45.0	

	BOOKSIN AV Southbound				CURTNER AV Westbound				BOOKSIN AV Northbound				CURTNER AV Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour From Intersection 16:45	18	66	46	130	43	643	73	759	34	32	27	93	30	733	17	780	1762
Volume	18	66	46	130	43	643	73	759	34	32	27	93	30	733	17	780	1762
Percent	13.8	50.8	35.4		5.7	84.7	9.6		36.6	34.4	29.0		3.8	94.0	2.2		
High Int.	17:00				17:00				18:45				18:45				17:00
Volume	7	22	14	39	14	171	22	195	11	9	10	25	10	199	6	209	447
Peak Factor				0.833				0.973				0.930				0.933	0.985



MARKS TRAFFIC DATA SERVICE

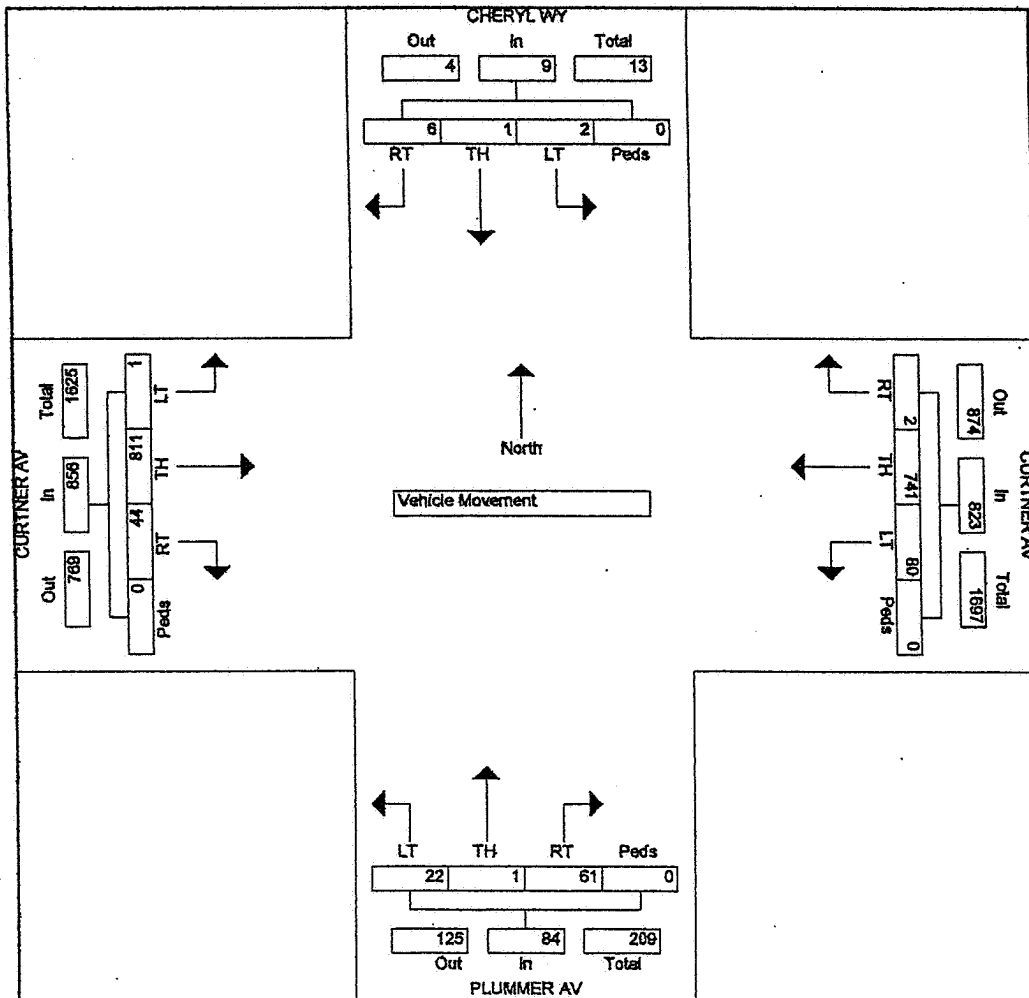
02
AN JOSE
EX RA
TO [916] 715 - 4006

File Name : plummer.curtner.p
Site Code : 00000000
Start Date : 03/13/2003
Page : 1

Groups Printed: Vehicle Movement

CHERYL WY Southbound					CURTNER AV Westbound				PLUMMER AV Northbound				CURTNER AV Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	1	0	1	2	2	157	16	175	16	0	9	25	9	199	0	208	410
16:15	2	0	0	2	1	166	14	181	5	1	3	9	13	202	1	216	408
16:30	0	0	5	5	2	145	14	161	12	0	8	20	10	217	2	229	415
16:45	1	0	1	2	0	188	24	212	7	1	4	12	11	196	0	207	433
Total	4	0	7	11	5	656	68	729	40	2	24	66	43	814	3	860	1666
17:00	1	0	1	2	0	184	21	205	16	0	5	21	13	208	1	222	450
17:15	1	0	0	1	1	182	17	200	31	0	11	42	13	216	0	229	472
17:30	3	1	0	4	1	187	18	206	7	0	2	9	7	191	0	198	417
17:45	2	0	1	3	1	171	15	187	5	0	2	7	6	178	0	184	381
Total	7	1	2	10	3	724	71	798	59	0	20	79	39	793	1	833	1720
Grand Total	11	1	9	21	8	1380	139	1527	99	2	44	145	82	1607	4	1693	3386
Apprch %	52.4	4.8	42.9		0.5	90.4	9.1		68.3	1.4	30.3		4.8	94.9	0.2		
Total %	0.3	0.0	0.3	0.6	0.2	40.8	4.1	45.1	2.9	0.1	1.3	4.3	2.4	47.5	0.1	50.0	

	CHERYL WY Southbound				CURTNER AV Westbound				PLUMMER AV Northbound				CURTNER AV Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour From Intersection	16:00 to 17:45 - Peak 1 of 1																
16:45																	
Volume	6	1	2	9	2	741	80	823	61	1	22	84	44	811	1	856	1772
Percent	66.7	11.1	22.2		0.2	90.0	9.7		72.6	1.2	26.2		5.1	94.7	0.1		
High Int.	17:30				16:45				17:15				17:15				17:15
Volume	3	1	1	4	1	188	24	212	31	1	11	42	13	216	1	229	472
Peak Factor				0.563				0.971				0.500				0.934	0.939



MARKS TRAFFIC DATA SERVICE

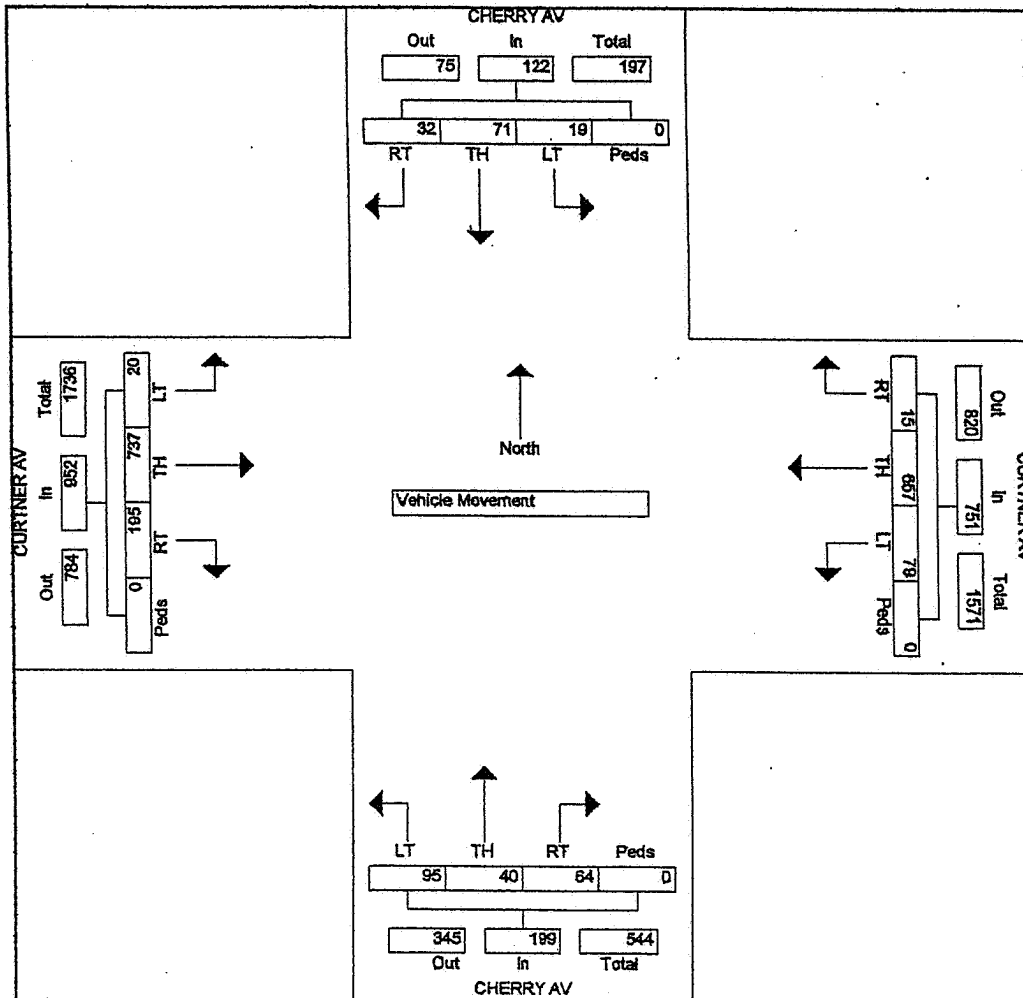
03
N JOSE
HEX C
PITO [916] 715-4006

File Name : cherry.curtner.p
Site Code : 00000000
Start Date : 03/13/2003
Page : 1

Groups Printed: Vehicle Movement

CHERRY AV Southbound					CURTNER AV Westbound				CHERRY AV Northbound				CURTNER AV Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
16:00	8	12	9	29	8	167	17	192	23	9	14	46	36	185	5	226	493
16:15	7	10	6	23	9	160	16	185	22	7	22	51	45	183	8	236	495
16:30	6	15	1	22	4	126	10	140	18	8	35	61	44	204	7	255	478
16:45	8	13	5	26	3	169	20	192	20	8	18	46	36	183	4	223	487
Total	29	50	21	100	24	622	63	709	83	32	89	204	161	755	24	940	1953
17:00	10	19	3	32	4	162	17	183	16	10	28	54	48	183	6	237	506
17:15	7	20	6	33	4	166	21	191	14	11	15	40	56	205	5	266	530
17:30	7	19	5	31	4	160	21	185	14	11	34	59	55	166	5	226	501
17:45	8	16	3	27	3	158	18	179	15	9	28	52	51	154	3	208	486
Total	32	74	17	123	15	648	77	738	59	41	105	205	210	708	19	937	2003
Grand Total	61	124	38	223	39	1268	140	1447	142	73	194	409	371	1463	43	1877	3956
Approch %	27.4	55.6	17.0		2.7	87.6	9.7		34.7	17.8	47.4		19.8	77.9	2.3		
Total %	1.5	3.1	1.0	5.6	1.0	32.1	3.5	36.6	3.6	1.8	4.9	10.3	9.4	37.0	1.1	47.4	

CHERRY AV Southbound					CURTNER AV Westbound				CHERRY AV Northbound				CURTNER AV Eastbound				Int. Total
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	
Peak Hour From 16:00 to 17:45 - Peak 1 of 1																	
Intersection 16:45																	
Volume	32	71	19	122	15	657	79	751	64	40	95	199	195	737	20	952	2024
Percent	26.2	58.2	15.6		2.0	87.5	10.5		32.2	20.1	47.7		20.5	77.4	2.1		
High Int. 17:15																	
Volume	10	20	6	33	4	169	21	192	20	11	34	59	56	205	6	266	530
Peak Factor				0.924				0.978				0.843				0.895	0.955



MARKS TRAFFIC DATA SERVICE

Page 1

PLUMMER AV. btwn CURTNER & MINARDI AV.

CITY OF SAN JOSE

Site Code: 1

plummer

Start Time	18- Mar- 03 Tue	NB		SB		19- Mar- 03 Wed	NB		SB		20- Mar- 03 Thu	NB		SB		Total	
		A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	15	*	15		1	14	1	25		3	14	0	17	5	100
12:15		*	11	*	21		1	15	1	64		0	12	2	23	4	146
12:30		*	24	*	22		0	49	1	57		2	24	1	19	4	195
12:45		*	14	*	14		2	26	0	90		2	13	1	25	5	182
01:00		*	11	*	22		2	32	1	57		1	18	1	16	5	156
01:15		*	15	*	20		0	28	1	31		1	24	1	19	3	137
01:30		*	9	*	11		0	16	1	23		0	14	0	15	1	88
01:45		*	15	*	17		0	21	0	27		0	10	1	22	1	112
02:00		*	26	*	19		0	22	1	27		0	18	1	21	2	133
02:15		*	7	*	28		0	27	1	26		0	20	1	33	2	141
02:30		*	27	*	38		0	32	0	28		0	18	0	12	0	155
02:45		*	47	*	50		0	31	0	42		2	60	0	62	2	292
03:00		*	27	*	52		0	25	1	55		1	21	1	72	3	252
03:15		*	23	*	34		1	21	0	48		1	17	0	42	2	185
03:30		*	27	*	37		0	83	0	38		0	19	0	35	0	239
03:45		*	34	*	38		1	30	0	21		0	20	0	30	1	173
04:00		*	20	*	49		0	19	0	25		0	23	0	45	0	181
04:15		*	21	*	21		0	22	0	29		2	27	0	35	2	155
04:30		*	24	*	34		1	14	0	24		1	25	0	28	2	149
04:45		*	19	*	21		1	25	4	26		1	16	2	30	8	137
05:00		*	17	*	55		3	16	0	28		2	14	0	35	5	165
05:15		*	36	*	24		4	18	1	23		2	15	1	40	8	156
05:30		*	22	*	39		3	8	2	40		3	29	2	31	10	169
05:45		*	22	*	38		8	13	3	28		4	20	4	44	19	165
06:00		*	25	*	31		17	25	25	27		5	10	6	42	53	160
06:15		*	18	*	32		15	22	13	32		9	18	7	44	44	166
06:30		*	12	*	32		13	15	6	28		15	16	5	33	39	136
06:45		*	17	*	42		20	18	20	26		18	10	15	18	73	131
07:00		*	14	*	45		23	22	42	23		20	21	54	33	139	158
07:15		*	18	*	24		38	22	134	41		31	24	119	47	322	176
07:30		*	31	*	18		33	12	86	8		44	14	84	25	247	108
07:45		*	35	*	12		35	10	46	13		17	21	58	16	153	107
08:00		*	19	*	13		24	13	63	15		23	23	66	12	176	95
08:15		*	17	*	13		23	9	19	13		15	20	23	15	80	87
08:30		*	18	*	8		15	16	19	13		15	27	26	8	75	90
08:45		*	6	*	7		22	9	9	15		14	10	18	9	63	56
09:00		*	17	*	16		13	18	22	12		19	12	19	9	73	84
09:15		*	2	*	15		22	11	13	10		18	20	14	10	67	68
09:30		*	2	*	6		20	5	17	4		12	10	16	9	65	36
09:45		*	3	*	6		19	5	12	3		9	8	11	5	51	30
10:00		*	2	*	3		11	3	9	4		11	7	12	9	43	28
10:15		*	3	*	6		11	2	15	6		14	2	8	3	48	22
10:30		*	0	*	7		20	3	14	6		16	1	15	6	65	23
10:45		*	12	*	3		11	4	26	1		14	3	9	1	60	24
11:00		*	6	*	3		20	2	12	6		14	6	11	2	57	25
11:15		*	2	*	0		14	1	18	1		12	2	14	2	58	8
11:30		*	1	*	1		18	2	24	1		17	1	13	3	72	9
11:45		*	1	*	1		15	1	20	0		14	1	18	3	67	7
Total		0	794	0	1063		500	857	702	1190		424	778	658	1115	2284	5797
Day Total		794		1063		1357		1892		1202		1773		8081			
Percent	0.0%	0.0%	100.0%	0.0%	100.0%		36.8%	63.2%	37.1%	62.9%		35.3%	64.7%	37.1%	62.9%		
Peak			02:30		02:30		07:15	02:45	07:15	00:15		07:15	02:15	07:15	02:45		
Volume			124		174		130	160	328	268		115	119	325	211		
P.H.F.			0.660		0.791		0.855	0.482	0.612	0.744		0.653	0.496	0.683	0.733		

MARKS TRAFFIC DATA SERVICE

Page 2

PLUMMER AV. btwn CURTNER & MINARDI AV.

CITY OF SAN JOSE

Site Code: 1
plummer

Start Time	21- Mar- 03 Fri	NB		SB		22- Mar- 03 Sat	NB		SB		23- Mar- 03 Sun	NB		SB		Total	
		A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		1	8	1	16		1	17	1	15		3	29	1	25	8	108
12:15		1	24	1	18		1	14	1	17		3	19	2	35	9	127
12:30		2	23	1	26		4	8	2	13		2	13	0	12	11	95
12:45		0	14	1	19		0	17	1	9		0	15	2	14	4	88
01:00		2	16	1	19		3	12	1	17		0	12	0	17	7	93
01:15		0	25	1	21		6	21	1	14		0	9	0	23	8	113
01:30		0	14	1	17		2	8	3	16		1	10	2	18	9	83
01:45		1	16	1	14		4	20	0	22		0	18	0	9	6	99
02:00		1	19	1	21		0	17	1	9		3	17	2	17	8	100
02:15		1	22	1	32		0	12	0	25		1	20	0	18	3	129
02:30		0	13	1	43		1	10	0	11		0	17	3	16	5	110
02:45		0	57	0	80		0	14	0	16		0	28	1	21	1	216
03:00		0	29	1	73		3	12	0	18		0	22	1	19	5	173
03:15		0	20	0	46		1	15	4	21		1	13	0	23	6	138
03:30		0	32	0	39		0	21	0	17		0	11	0	13	0	133
03:45		0	19	0	22		0	15	0	22		0	14	0	17	0	109
04:00		0	31	0	20		0	17	0	17		1	7	0	9	1	101
04:15		2	20	1	22		1	9	1	15		0	17	1	19	6	102
04:30		4	11	3	20		0	12	1	18		1	14	0	10	9	85
04:45		1	23	1	22		0	9	0	16		1	20	1	11	4	101
05:00		1	19	4	29		1	12	2	17		0	16	1	15	9	108
05:15		5	12	0	39		0	15	1	24		2	15	2	11	10	116
05:30		5	10	1	25		0	14	1	9		0	8	1	8	8	74
05:45		3	17	2	31		2	11	4	13		7	18	3	20	21	110
06:00		7	11	9	22		3	10	0	11		4	17	0	12	23	83
06:15		9	19	13	22		3	21	6	13		3	13	6	11	40	99
06:30		19	19	5	15		7	17	2	17		4	11	8	7	45	86
06:45		24	17	12	16		8	16	5	15		6	15	9	6	64	85
07:00		23	19	64	26		7	8	8	8		5	9	11	7	118	75
07:15		27	19	133	15		2	8	1	8		2	9	2	6	167	65
07:30		44	10	89	14		9	7	2	6		7	8	0	15	151	60
07:45		23	14	49	16		12	7	6	6		5	6	5	5	100	54
08:00		24	5	69	6		17	4	2	11		2	7	6	17	120	50
08:15		21	13	24	10		10	5	6	9		0	7	13	7	74	51
08:30		25	11	30	5		11	7	7	7		7	7	4	5	84	42
08:45		14	6	13	10		14	8	16	9		14	4	15	4	86	41
09:00		10	7	20	6		19	9	23	7		11	12	13	7	96	48
09:15		16	4	14	8		12	6	20	5		18	5	29	4	109	32
09:30		12	5	11	4		25	2	19	4		11	4	12	4	90	23
09:45		13	5	9	7		22	2	13	4		12	7	14	3	83	28
10:00		21	2	14	13		13	3	12	10		11	6	12	4	83	38
10:15		11	8	17	3		15	0	9	9		16	3	20	3	88	26
10:30		11	6	15	8		11	2	22	1		14	2	34	5	107	24
10:45		14	8	6	5		11	8	15	5		13	10	12	2	71	38
11:00		8	6	17	3		16	2	17	6		15	1	9	0	82	18
11:15		16	2	23	3		19	2	17	3		11	0	14	0	100	10
11:30		22	3	21	3		12	3	11	4		11	0	12	2	89	15
11:45		16	1	19	4		18	7	15	4		15	1	26	2	109	19
Total		460	712	720	958		326	494	279	573		243	546	309	538	2337	3821
Day Total		1172		1678			820		852			789		847		6158	
Percent	0.0%	39.2%	60.8%	42.9%	57.1%		39.8%	60.2%	32.7%	57.3%		30.8%	69.2%	36.5%	63.5%		
Peak		06:45	02:45	07:15	02:30		08:00	03:15	08:45	03:00		10:15	02:15	09:45	12:00		
Volum		118	138	340	242		78	68	78	78		58	87	80	86		
e																	
P.H.F.		0.670	0.606	0.639	0.756		0.780	0.810	0.848	0.780		0.806	0.750	0.588	0.614		

MARKS TRAFFIC DATA SERVICE

Page 3

PLUMMER AV. btwn CURTNER & MINARDI AV.

CITY OF SAN JOSE

Site Code: 1
plummer

Time	Start	24-Mar-03		25-Mar-03		26-Mar-03		27-Mar-03		28-Mar-03		29-Mar-03		30-Mar-03		Total	
		NB		SB		NB		SB		NB		SB		NB		Total	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		0	11	1	12	1	*	0	*	*	*	*	*	*	*	2	23
12:15		2	12	3	15	1	*	2	*	*	*	*	*	*	*	8	27
12:30		0	12	1	10	0	*	1	*	*	*	*	*	*	*	2	22
12:45		0	11	0	20	1	*	0	*	*	*	*	*	*	*	1	31
01:00		1	17	1	18	0	*	4	*	*	*	*	*	*	*	6	35
01:15		0	12	1	11	3	*	0	*	*	*	*	*	*	*	4	23
01:30		1	8	0	14	0	*	1	*	*	*	*	*	*	*	2	22
01:45		1	17	1	17	2	*	0	*	*	*	*	*	*	*	4	34
02:00		0	13	0	16	1	*	1	*	*	*	*	*	*	*	2	29
02:15		0	16	0	13	0	*	1	*	*	*	*	*	*	*	1	29
02:30		0	10	1	25	0	*	0	*	*	*	*	*	*	*	1	35
02:45		1	29	0	53	0	*	0	*	*	*	*	*	*	*	1	82
03:00		0	18	0	43	1	*	0	*	*	*	*	*	*	*	1	61
03:15		1	26	1	32	0	*	1	*	*	*	*	*	*	*	3	58
03:30		0	18	0	22	0	*	1	*	*	*	*	*	*	*	1	40
03:45		0	11	0	18	0	*	0	*	*	*	*	*	*	*	0	29
04:00		0	27	0	25	1	*	2	*	*	*	*	*	*	*	3	52
04:15		2	13	0	21	0	*	0	*	*	*	*	*	*	*	2	34
04:30		1	16	0	27	1	*	1	*	*	*	*	*	*	*	3	43
04:45		1	17	2	34	1	*	2	*	*	*	*	*	*	*	6	51
05:00		3	23	2	30	2	*	2	*	*	*	*	*	*	*	9	53
05:15		2	18	2	28	3	*	0	*	*	*	*	*	*	*	7	46
05:30		5	17	4	37	4	*	2	*	*	*	*	*	*	*	15	54
05:45		10	15	2	37	11	*	2	*	*	*	*	*	*	*	25	52
06:00		6	11	3	21	4	*	4	*	*	*	*	*	*	*	17	32
06:15		6	15	8	25	7	*	10	*	*	*	*	*	*	*	31	40
06:30		11	18	2	16	22	*	12	*	*	*	*	*	*	*	47	34
06:45		17	15	9	15	18	*	25	*	*	*	*	*	*	*	69	30
07:00		19	9	7	14	26	*	74	*	*	*	*	*	*	*	126	23
07:15		12	14	7	13	29	*	136	*	*	*	*	*	*	*	184	27
07:30		16	12	13	12	34	*	46	*	*	*	*	*	*	*	109	24
07:45		26	10	54	8	24	*	58	*	*	*	*	*	*	*	162	18
08:00		16	7	66	8	28	*	67	*	*	*	*	*	*	*	175	15
08:15		16	4	31	8	22	*	28	*	*	*	*	*	*	*	97	12
08:30		18	9	17	9	19	*	15	*	*	*	*	*	*	*	69	18
08:45		17	25	19	9	18	*	16	*	*	*	*	*	*	*	70	34
09:00		15	21	7	5	20	*	21	*	*	*	*	*	*	*	63	26
09:15		7	7	9	9	17	*	9	*	*	*	*	*	*	*	42	16
09:30		15	5	11	7	18	*	10	*	*	*	*	*	*	*	54	12
09:45		12	2	11	6	13	*	9	*	*	*	*	*	*	*	45	8
10:00		7	1	4	10	11	*	6	*	*	*	*	*	*	*	28	11
10:15		9	3	8	8	8	*	11	*	*	*	*	*	*	*	36	11
10:30		8	3	13	2	10	*	12	*	*	*	*	*	*	*	43	5
10:45		13	10	13	4	9	*	11	*	*	*	*	*	*	*	46	14
11:00		14	2	13	2	12	*	15	*	*	*	*	*	*	*	54	4
11:15		16	2	17	5	10	*	14	*	*	*	*	*	*	*	57	7
11:30		14	3	24	1	11	*	11	*	*	*	*	*	*	*	60	4
11:45		9	0	16	1	12	*	14	*	*	*	*	*	*	*	51	1
Total		350	595	404	796	433	0	657	0	0	0	0	0	0	0	1844	1391
Day Total		945		1200		433		657		0		0				3235	
Percent		0.0%	37.0%	63.0%	33.7%	66.3%		100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Peak Volume		07:45	02:45	07:45	02:30	07:00		07:00									
P.H.F.		0.731	0.784	0.636	0.722	0.831		0.577									
Combined Total		2911		3941		2610		3401		1991		2620				17474	

TO: KAMAL
SINGHFROM: MIETEK
@ MTDS

Volumes and Graphics

Location: Plummer Ave (bwrn - Curtner Ave & Minardi Ave)

Date of Count: 3/19/2003				Wednesday				Date of Count: 3/22/2003				Saturday				Date of Count: 3/23/2003				Sunday			
PM Peak Hour				PM Peak Hour				PM Peak Hour				PM Peak Hour				PM Peak Hour				PM Peak Hour			
Direction				Direction				Direction				Direction				Direction				Direction			
Time	NB	Hour Total	SB	Hour Total	Total	Time	NB	Hour Total	SB	Hour Total	Total	Time	NB	Hour Total	SB	Hour Total	Total	Time	NB	Hour Total	SB	Hour Total	Total
4:00	19		25		44	4:00	17		17		34	4:00	7		9		16	4:00	7		9		16
4:15	22		29		51	4:15	9		15		24	4:15	17		19		36	4:15	17		19		36
4:30	14		24		38	4:30	12		18		30	4:30	14		10		24	4:30	14		10		24
4:45	25	80	26	104	51	4:45	9	47	16	66	25	20	58	11	49	31		4:45	20	58	11	49	31
5:00	16		28		44	5:00	12		17		29	5:00	16		15		31	5:00	16		15		31
5:15	18		23		41	5:15	15		24		39	5:15	15		11		26	5:15	15		11		26
5:30	8		40		48	5:30	14		9		23	5:30	8		8		16	5:30	8		8		16
5:45	13	80	28	119	41	5:45	11	62	13	63	24	5:45	18	74	20	54	38	5:45	18	74	20	54	38
6:00	25		27		52	6:00	10		11		21	6:00	17		12		29	6:00	17		12		29
6:15	22		32		54	6:15	21		13		34	6:15	13		11		24	6:15	13		11		24
6:30	15		28		43	6:30	17		17		34	6:30	11		7		18	6:30	11		7		18
6:45	18		26		44	6:45	16		15	56	31	6:45	15	48	6	36	21	6:45	15	48	6	36	21
7:00	22	77	23	113	45	7:00	6		8		14	7:00	9		7		16	7:00	9		7		16
7:15	22		41		63	7:15	8		8		16	7:15	9		6		15	7:15	9		6		15
7:30	12		8		20	7:30	7		6		13	7:30	8		15		23	7:30	8		15		23
7:45	10	44	13	85	23	7:45	7	22	6	28	13	7:45	6	23	5	33	11	7:45	6	23	5	33	11
Total	281	281	421	421	702	Total	191	191	213	213	404	Total	203	203	172	172	375	Total	203	203	172	172	375

Volumes and Graphics

3341
Intersection Name: Booksin Ave & Curtner Ave
Peak Hour: PM
Date of Analysis: 03/31/03
Count Date: 03/13/03
Scenario:
Growth Factor: Future Growth % Per Year 0.012
Number of Months: 0.0
Number of Years to Buildout: 2.0

Scenario:	North Approach			Movements			South Approach			West Approach		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	18	66	46	43	643	73	34	32	27	30	733	17
Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0
Background Volumes	18	66	46	43	643	73	34	32	27	30	733	17
Project Trips	0	0	0	0	16	0	0	0	0	0	12	0
Project Conditions	18	66	46	43	659	73	34	32	27	30	745	17
Future Growth Conditions	18	68	47	44	674	75	35	33	28	31	763	17

3397
Intersection Name: Cherry Ave & Curtner Ave
Peak Hour: PM
Date of Analysis: 03/31/03
Count Date: 03/13/03
Scenario:
Growth Factor: Future Growth % Per Year 0.012
Number of Months: 0.0
Number of Years to Buildout: 2.0

Scenario:	North Approach			Movements			South Approach			West Approach		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	32	71	19	15	657	79	64	40	95	195	737	20
Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0
Background Volumes	32	71	19	15	657	79	64	40	95	195	737	20
Project Trips	0	0	0	0	16	4	5	0	0	0	21	0
Project Conditions	32	71	19	15	673	83	69	40	95	195	758	20
Future Growth Conditions	33	73	19	15	689	85	71	41	97	200	776	20

Volumes and Graphics

18926

Intersection Name: Plummer Ave & Curtner Ave
Peak Hour: PM

Date of Analysis: 03/31/03

Scenario: Count Date: 03/13/03

Growth Factor: Future Growth % Per Year 0.012

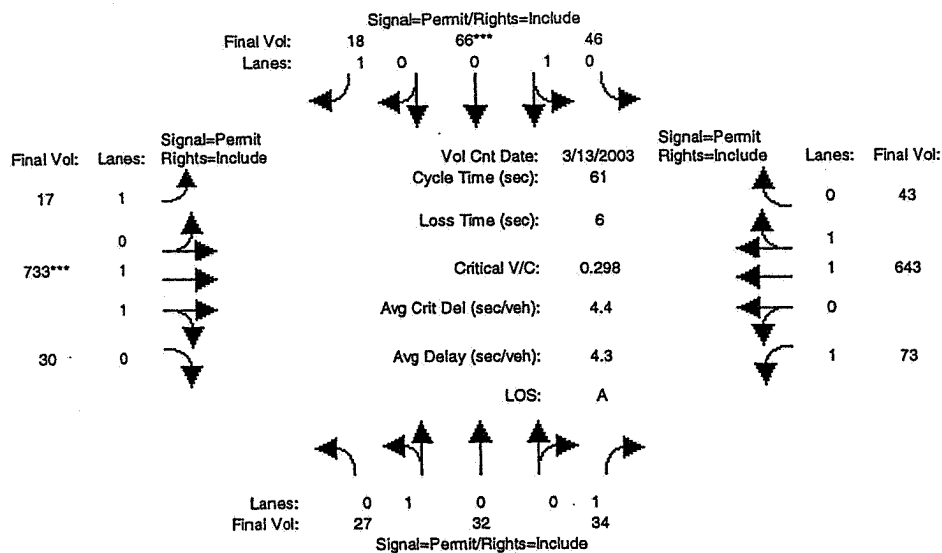
Number of Months: 0.0 Number of Years to Buildout: 2.0

Scenario:	Movements											
	North Approach			East Approach			South Approach			West Approach		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Existing	6	1	2	2	741	80	61	1	22	44	811	1
Approved Trips	0	128	0	0	0	0	0	17	0	0	0	0
Background Volumes	6	129	2	2	741	80	61	18	22	44	811	1
Project Trips	0	0	0	0	0	16	21	0	16	12	0	0
Project Conditions	6	129	2	2	741	96	82	18	38	56	811	1
Future Growth Conditions	6	129	2	2	759	98	83	18	39	57	830	1

City of San Jose
Presentation High School - Phase II Sports Field Improvements

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
Existing (PM)

Intersection #3341: BOOKSIN/CURTNER

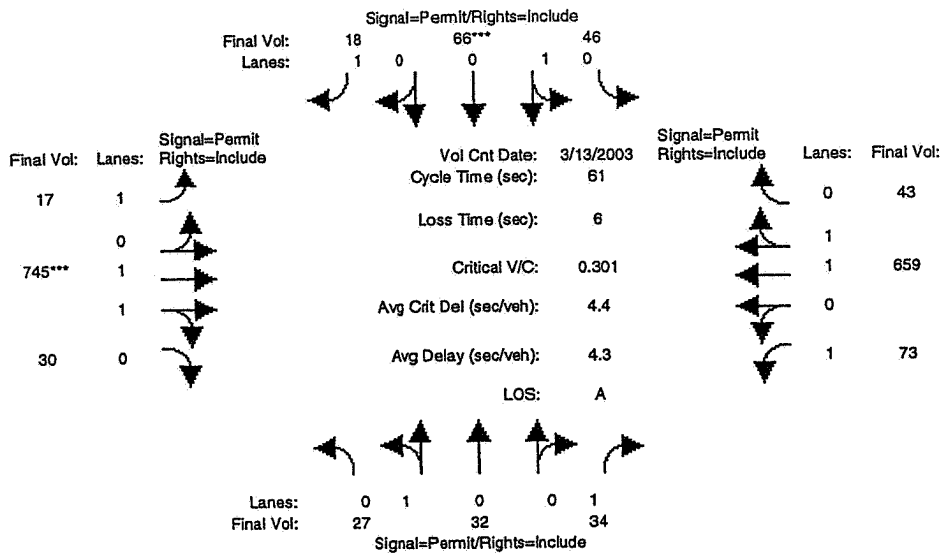


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 13 Mar 2003 << 4:45-5:45PM												
Base Vol:	27	32	34	46	66	18	17	733	30	73	643	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	32	34	46	66	18	17	733	30	73	643	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	32	34	46	66	18	17	733	30	73	643	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	32	34	46	66	18	17	733	30	73	643	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	32	34	46	66	18	17	733	30	73	643	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	32	34	46	66	18	17	733	30	73	643	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.46	0.54	1.00	0.41	0.59	1.00	1.00	1.92	0.08	1.00	1.87	0.13
Final Sat.:	824	976	1750	739	1061	1750	1750	3554	145	1750	3468	232
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.02	0.06	0.06	0.01	0.01	0.21	0.21	0.04	0.19	0.19
Crit Moves:	****											
Green Time:	12.7	12.7	12.7	12.7	12.7	12.7	42.3	42.3	42.3	42.3	42.3	42.3
Volume/Cap:	0.16	0.16	0.09	0.30	0.30	0.05	0.01	0.30	0.30	0.06	0.27	0.27
Delay/Veh:	15.0	15.0	14.8	15.6	15.6	14.7	2.2	2.8	2.8	2.3	2.7	2.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.0	15.0	14.8	15.6	15.6	14.7	2.2	2.8	2.8	2.3	2.7	2.7
DesignQueue:	1	1	1	1	2	0	0	8	0	1	7	0

City of San Jose
Presentation High School - Phase II Sports Field Improvements

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
Project (PM)

Intersection #3341: BOOKSIN/CURTNER

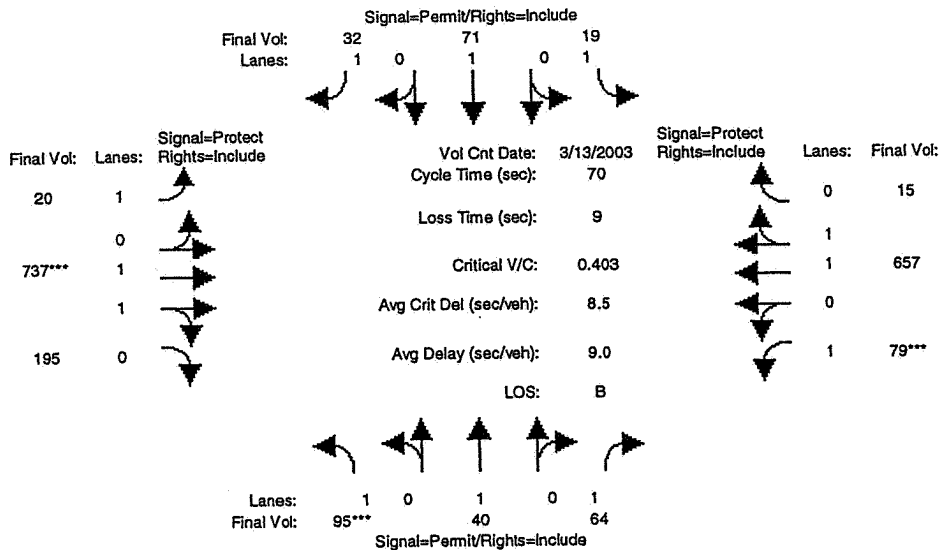


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date:	13 Mar 2003 << 4:45-5:45PM											
Base Vol:	27	32	34	46	66	18	17	733	30	73	643	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	32	34	46	66	18	17	733	30	73	643	43
Added Vol:	0	0	0	0	0	0	0	12	0	0	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	32	34	46	66	18	17	745	30	73	659	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	32	34	46	66	18	17	745	30	73	659	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	32	34	46	66	18	17	745	30	73	659	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	32	34	46	66	18	17	745	30	73	659	43
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	0.97	1.00	1.00	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	0.46	0.54	1.00	0.41	0.59	1.00	1.00	1.92	0.08	1.00	1.87	0.13
Final Sat.:	824	976	1750	739	1061	1750	1750	3557	143	1750	3473	227
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.02	0.06	0.06	0.01	0.01	0.21	0.21	0.04	0.19	0.19
Crit Moves:	****											
Green Time:	12.6	12.6	12.6	12.6	12.6	12.6	42.4	42.4	42.4	42.4	42.4	42.4
Volume/Cap:	0.16	0.16	0.09	0.30	0.30	0.05	0.01	0.30	0.30	0.06	0.27	0.27
Delay/Veh:	15.1	15.1	14.9	15.7	15.7	14.7	2.2	2.7	2.7	2.2	2.7	2.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.1	15.1	14.9	15.7	15.7	14.7	2.2	2.7	2.7	2.2	2.7	2.7
DesignQueue:	1	1	1	1	2	0	0	8	0	1	7	0

City of San Jose
Presentation High School - Phase II Sports Field Improvements

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
Existing (PM)

Intersection #3397: CHERRY/CURTNER

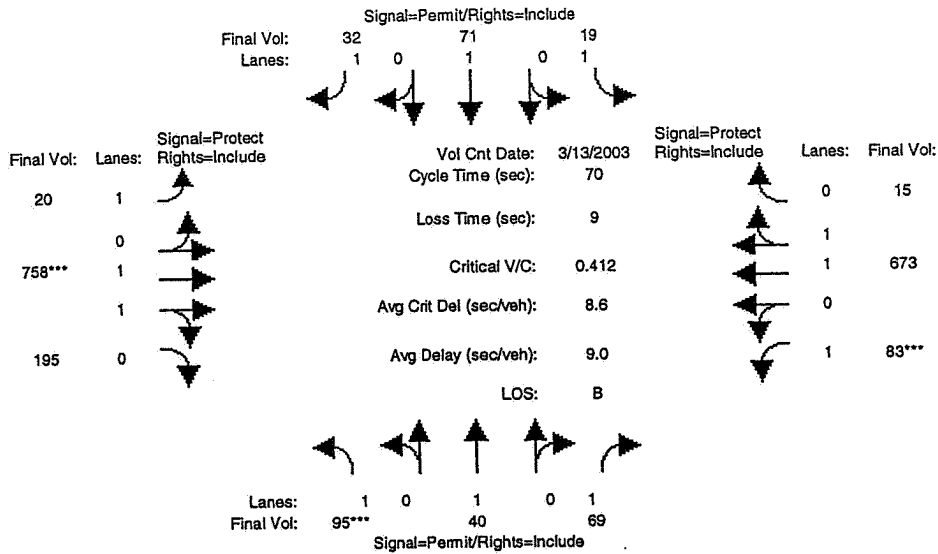


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 13 Mar 2003 << 4:45-5:45PM												
Base Vol:	95	40	64	19	71	32	20	737	195	79	657	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	40	64	19	71	32	20	737	195	79	657	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	40	64	19	71	32	20	737	195	79	657	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	40	64	19	71	32	20	737	195	79	657	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	40	64	19	71	32	20	737	195	79	657	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	95	40	64	19	71	32	20	737	195	79	657	15
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.04	1.00	0.97	1.03	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.57	0.43	1.00	1.95	0.05
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	2925	774	1750	3617	83
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.04	0.01	0.04	0.02	0.01	0.25	0.25	0.05	0.18	0.18
Crit Moves:	****						****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	10.0	41.0	41.0	10.0	41.0	41.0
Volume/Cap:	0.38	0.15	0.26	0.08	0.26	0.13	0.08	0.43	0.43	0.32	0.31	0.31
Delay/Veh:	21.1	20.0	20.4	19.8	20.4	19.9	19.8	6.2	6.2	20.7	5.6	5.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.1	20.0	20.4	19.8	20.4	19.9	19.8	6.2	6.2	20.7	5.6	5.6
DesignQueue:	3	1	2	1	2	1	1	13	3	3	11	0

City of San Jose
Presentation High School - Phase II Sports Field Improvements

Level Of Service Computation Report
1985 HCM Operations (Future Volume Alternative)
Project (PM)

Intersection #3397: CHERRY/CURTNER

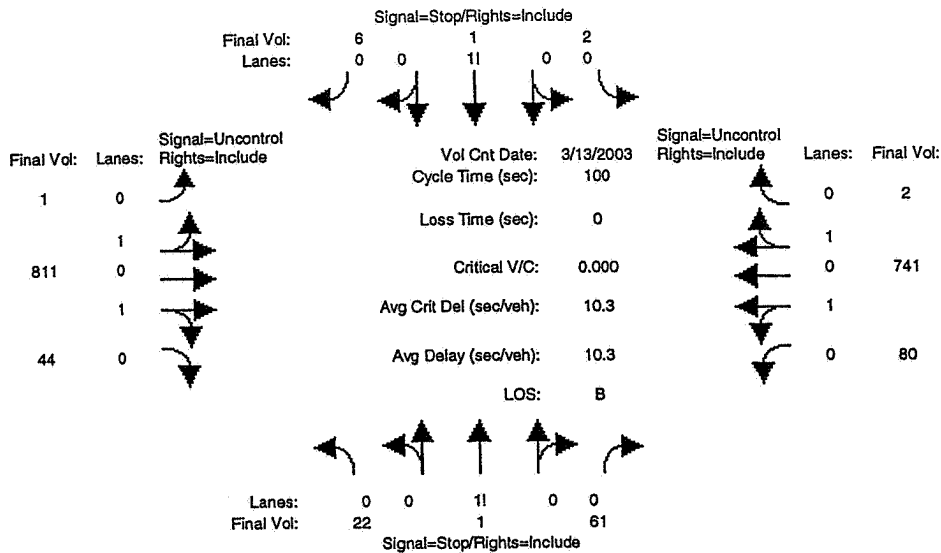


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 13 Mar 2003 << 4:45-5:45PM												
Base Vol:	95	40	64	19	71	32	20	737	195	79	657	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	40	64	19	71	32	20	737	195	79	657	15
Added Vol:	0	0	5	0	0	0	0	21	0	4	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	40	69	19	71	32	20	758	195	83	673	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	40	69	19	71	32	20	758	195	83	673	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	40	69	19	71	32	20	758	195	83	673	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	95	40	69	19	71	32	20	758	195	83	673	15
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.06	0.97	0.97	1.06	0.97	0.97	1.03	1.00	0.97	1.03	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.58	0.42	1.00	1.96	0.04
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	2942	757	1750	3619	81
Capacity Analysis Module:												
Vol/Sat:	0.05	0.02	0.04	0.01	0.04	0.02	0.01	0.26	0.26	0.05	0.19	0.19
Crit Moves:	****						****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	10.0	41.0	41.0	10.0	41.0	41.0
Volume/Cap:	0.38	0.15	0.28	0.08	0.26	0.13	0.08	0.44	0.44	0.33	0.32	0.32
Delay/Veh:	21.1	20.0	20.5	19.8	20.4	19.9	19.8	6.2	6.2	20.8	5.6	5.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.1	20.0	20.5	19.8	20.4	19.9	19.8	6.2	6.2	20.8	5.6	5.6
DesignQueue:	3	1	2	1	2	1	1	13	3	3	11	0

City of San Jose
Presentation High School - Phase II Sports Field Improvements

Level Of Service Computation Report
1997 HCM Unsignalized (Future Volume Alternative)
Existing (PM)

Intersection #18926: Plummer/Curtner

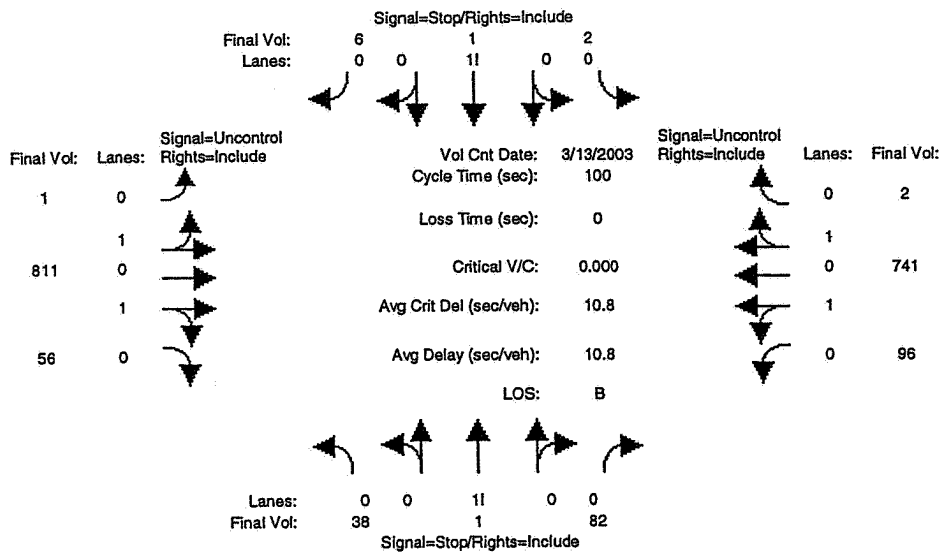


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 13 Mar 2003 << 4:45-5:45PM												
Base Vol:	22	1	61	2	1	6	1	811	44	80	741	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	1	61	2	1	6	1	811	44	80	741	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	1	61	2	1	6	1	811	44	80	741	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	22	1	61	2	1	6	1	811	44	80	741	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	22	1	61	2	1	6	1	811	44	80	741	2
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1366	1738	428	1310	1759	372	743	xxxx	xxxxx	855	xxxx	xxxxx
Potent Cap.:	108	88	581	119	86	632	873	xxxx	xxxxx	793	xxxx	xxxxx
Move Cap.:	97	79	581	97	76	632	873	xxxx	xxxxx	793	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	9.1	xxxx	xxxxx	9.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	757	xxxxx	xxxx	805	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:xxxxx	10.3	xxxxx	xxxxx	9.5	xxxxx	xxxxx	9.1	xxxx	xxxxx	10.0	xxxx	xxxxx
Shared LOS:	*	B	*	*	A	*	A	*	*	B	*	*
ApproachDel:	10.3			9.5			xxxxx			xxxxx		
ApproachLOS:	B			A			*			*		

City of San Jose
Presentation High School - Phase II Sports Field Improvements

Level Of Service Computation Report
1997 HCM Unsignalized (Future Volume Alternative)
Project (PM)

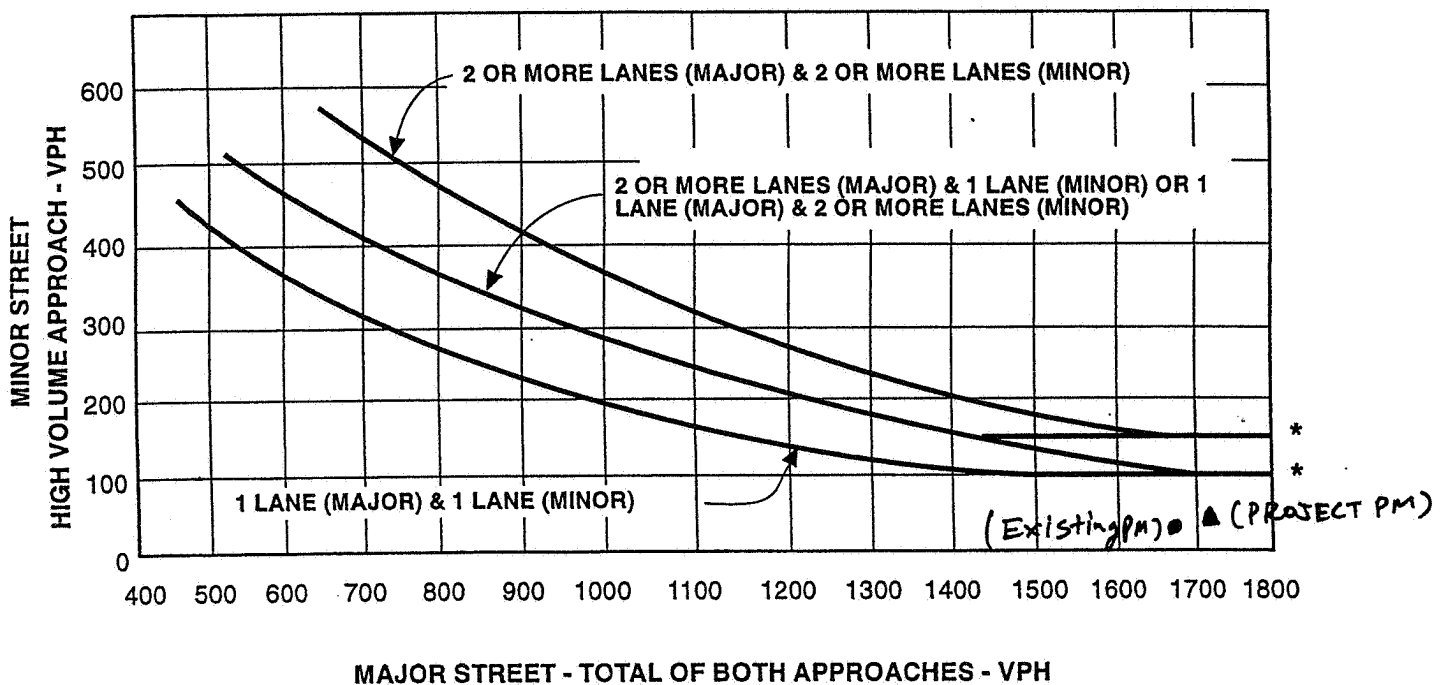
Intersection #18926: Plummer/Curtner



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 13 Mar 2003 << 4:45-5:45PM												
Base Vol:	22	1	61	2	1	6	1	811	44	80	741	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	1	61	2	1	6	1	811	44	80	741	2
Added Vol:	16	0	21	0	0	0	0	0	12	16	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	1	82	2	1	6	1	811	56	96	741	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	1	82	2	1	6	1	811	56	96	741	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	38	1	82	2	1	6	1	811	56	96	741	2
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxx	4.1	xxxx	xxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxx	2.2	xxxx	xxxx
Capacity Module:												
Cnflct Vol:	1401	1774	434	1339	1801	368	739	xxxx	xxxx	867	xxxx	xxxx
Potent Cap.:	102	84	576	113	81	634	875	xxxx	xxxx	785	xxxx	xxxx
Move Cap.:	90	73	576	86	70	634	875	xxxx	xxxx	785	xxxx	xxxx
Level Of Service Module:												
Stopped Del:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	9.1	xxxx	xxxx	9.6	xxxx	xxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	738	xxxx	xxxx	791	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd StpDel:	xxxx	10.8	xxxx	xxxx	9.6	xxxx	9.1	xxxx	xxxx	10.2	xxxx	xxxx
Shared LOS:	*	B	*	*	A	*	A	*	*	B	*	*
ApproachDel:	10.8			9.6			xxxxxx			xxxxxx		
ApproachLOS:	B			A			*			*		

Figure 9-8
PEAK HOUR VOLUME WARRANT
(Urban Areas)

PLUMMER / CURTNER



* NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET
APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER
THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

WARRANT 11- Peak Hour Volume

YES ☐ NO ☒

Approach Lanes	One	2 or more	Existing PM	Project PM	SATISFIED*	Hour
Both Approaches - Major Street		✓	1679	1707		
Highest Approaches - Minor Street	✓		23*	39*		

* Refer to Figure 9-8 (URBAN AREAS) or Figure 9-9 (RURAL AREAS) to determine if this warrant is satisfied.

* Excluding Right turns.

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence

Summary of existing on-site sports Schedule

[illegible]

Summary of existing off-site sports schedule

[illegible]

Summary of future on-site sports schedule

On Site Sports Activities

Summary of future off-site sports schedule

		Sport	Students	Coaches	Spectators	Practice		Match		Remarks
						Weekdays	Weekends	Weekdays	Weekends	
Off Site Sports Activity	September-05	Tennis	30	2	15	15	-	4	-	Practice Time 3-6PM Weekdays. Match Time 3-6PM. Season Starts 9/4
	October-05	Tennis	30	2	15	13	-	10	-	Practice Time 3-6PM (MWF). Match Time 3-6PM (TTh). Season Ends 10/31
	November-05	Tennis	30	2		3	-	-	-	Post Season Practice 3-6PM Weekdays. Post Season practice ends 11/5